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ABSTRACT

Of the three organizational variables that can be understood to influence the work of school specialists, only organizational structure appears to be under the control of school officials. This conclusion was reached by researchers following a year-long study involving close observation of nine carefully selected school specialists from California school districts, interviews with principals and teachers with whom the specialists worked, and examination of documents. To be selected, specialists had to work collaboratively with regular classroom teachers, share pupils with the teachers, help select the pupils to be provided services, and be involved in remedial rather than enrichment programs. The work of these specialists and the organizational contexts in which the work was performed were compared by linking the patterns and variations in the subjects' working conditions to organizational factors within the organizational contexts concerned. The study indicated that officials have little control over organizational goals and organizational technology, but that within the area of organizational structure they could exercise control over lines of authority, lines of communication, and lines of responsibility, all of which affected specialists' working abilities. The bulk of this report provided specific illustrations of the impact of organizational factors on the subjects' working patterns. Three pages of references concludes this document. (PGD)

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SCHOOL SPECIALISTS: THEIR WORK AND THE ORGANIZATIONAL FACTORS WHICH CONDITION THEIR WORK

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Introduction

Background of the Study

The organizational research on schools has tended to focus predominantly on the work of teachers in classrooms and, to a lesser extent, on the work of building administrators, particularly school principals. The work of other categories of school staff members has not been the subject of many systematic research projects. School specialists are among these.

There is a current trend toward the use of specialists in schools, particularly in the area of special education; the trend seems to be increasing (Lynch, 1977). The experimentation with and apparent trend toward organizational arrangements in which specialists are expected to collaborate with classroom teachers in providing educational services to jointly assigned pupils seem to be popular phenomena in schools (MacMillan, Jones & Meyers, 1976). However, collaborative arrangements between teachers and specialists appear to be more difficult to accomplish than is sometimes envisioned (Costanza & Klapman, 1970; Hammil, 1972; Seaton, Lasky & Seaton, 1974). Within the literature directly or indirectly concerned with school specialists, there is little written regarding the work of specialists from a descriptive and/or analytic perspective. Literature related to sociological aspects of special education does exist (Tomlinson, 1982), but it deals with special education from a broad perspective and is not specifically concerned with the work of school specialists. In literature written for specialists, the focus has been on techniques for classroom instruction and/or behavior management rather than on describing and analyzing the work of specialists (Stephens, 1977; Turnbull & Schulz, 1979; Mann & Sabatino, 1980). Even with the increase in the number of school specialists as a result of the Education for All Handicapped Children Act of 1975 (P.L. 94-142) and state special education and remedial education statutes, there has been little work designed to understand the nature of the work of school specialists. Since the current theoretical knowledge regarding the nature of the work of specialists in public schools is almost nonexistent, the results of the research reported in this paper are intended to provide a means of understanding and, perhaps, dealing with at least some of the problems which become apparent as more and more specialists populate schools.

Perspective in the Study

This paper is based on a qualitative study (Reed, 1980) which examined the work of school-based specialists. A sociological perspective provided the theoretical orientation for the research. The study focused on the work of school specialists as a class of organizational members by examining in detail the work of a small but careful selected sample of specialists. In the sociological tradition, it was assumed that the qualities of the work of specialists as a class of organizational members spring primarily from the organizational context in which they work and not from the individual personalities of the specialists involved. Although it can be argued that specialists, as individual organizational members, do affect the context of their work, this area of inquiry was not included in the study.

Purposes of the Study and Paper

The purposes of the research project and the paper can be understood in terms of several questions. These questions are: (1) what is the nature of the work of school specialists and (b) what are the organizational factors in the work contexts of school specialists that condition their work? School specialists are considered as those specialists who work in only one school and who are expected to coordinate their work with classroom teachers in providing educational services, primarily of a remedial nature, to mutually shared students. The overall purpose of the research project and this report is to develop a grounded theory (Glaser & Strauss, 1967) concerning the work and organizational factors which condition the work of school specialists.

Research Methodology

The study employed qualitative research methods (Schatzman & Strauss, 1973) involving a theoretically selected sample (Glaser & Strauss, 1967) of school specialists. Two explicit areas of comparison served as guides to sample selection, data collection, and analysis of data. First, the work and organizational contexts of specialists were compared to the work and organizational contexts of classroom teachers. And second, the work and organizational contexts were compared among specialists.

In the latter case, the work and organizational context of specialists were compared by: (a) selecting a sample of specialists who worked in organizational contexts which were similar in certain respects and different in others, (b) collecting data regarding the similarities and differences in the work among the specialists, (c) analyzing the data in terms of the patterns and variations of patterns in the work among specialists, and, (d) linking the patterns and their variations to organizational factors within the organizational contexts in which the specialists worked.

In the former case, data regarding the work of specialists and the organizational context in which specialists work were compared to descriptions and analyses of the work of teachers and the organizational context of the work of classroom teachers found in literature.

Sample Selection Criteria

Four considerations guided the selection of specialists to be included in the sample. These were: (a) the specialists must be expected to collaborate with regular classroom teachers in planning for and delivering educational services to pupils; (b) the specialists must share pupils with regular classroom teachers; (c) the specialists must play a significant role in the selection of pupils to whom specialized services are given; and (d) the specialists must be involved in remedial programs as compared to enrichment programs.

Sample Selection

Interviews were conducted with a variety of central office administrators in eight school districts in a southern California county to assist in the identification of specialists who would meet the sampling criteria. Through the interviews, 37 different specialists representing five general classes of specialists were identified. Each of the 37 specialists were interviewed to determine if their positions did indeed meet the criteria of the study, to obtain an initial understanding of their work and of the organizational contexts in which they worked, and to assess their willingness to participate in the observational portion of the study. Nine specialists were identified to participate in the observational portion of the study. These specialists represented variations in area of specialization, work location, case load size, degree of involvement in case load selection, grade levels served, and gender. Figure 1 provides a list of specialists included in the study and their respective qualities in each of the selection criteria categories.

Data Collection

Data collection during the observational portion of the study involved recording field notes while the specialists were engaged in their normal work routines. Each specialist was observed for about 24 hours during the course of one school year. Data collection also involved conducting and recording interviews with principals and teachers. A variety of documents were also collected. Field data collection spanned a seven-month period during one academic year, produced 800 pages of notes, numerous documents, and 35 hours of taped interviews.

Figure 1

Sample of Specialists

Name	Type of Specialist	Location of Work: Regular Classroom	Location of Work: Special Classroom	Approximate Size of Case Load	Degree of Involvement in Selection of Case Load	Grade Levels Served
Mrs. H	Learning Disabilities	2/3 time	1/3 time	12	None	3-6
Mr. G	Learning Disabilities	Special room opening onto two classrooms		15	None	4-5
Mrs. J	Learning Disabilities		X	17	None	3-6
Mrs. C	Learning Disabilities		X	16	None	2-6
Mrs. F	Learning Disabilities		X	18	None	9-12
Mrs. D	Miller-Unruh Reading Specialist	X		44	High	K-3
Mrs. O	Early Childhood Education Reading Specialist	X		41	High	K-3
Mrs. Ja	Title I Math Specialist		X	84	Moderate	1-6
Mrs. S	Combined Project Diagnostic Specialist		X	11	High	1-3

Analytic Framework

For purposes of analyzing and presenting an analysis of the field data, a theoretical framework derived from Perrow's (1965) work was used. A summary of the features of Perrow's ideas will be useful before proceeding with a presentation of the field data analysis.

In investigating the work of a class of organizational members (school specialists in the present case), Perrow suggests that there are two broad categories of theoretical importance. One of these is concerned with the organizational context and the other is concerned with the actual work. With respect to the organizational context, Perrow argues that there are three variables which are useful in describing and analyzing the factors which condition the work of organizational members. In Perrow's words these are "goals (or, in the broader sense belief systems and values), technology (techniques necessary for execution of a task), and structure (the arrangement of tasks and persons...)" (1965, p. 914, emphasis added). Furthermore, he argues that these variables are interdependent and that organizational goals and technology have their roots in the broader cultural context of the organization.

Perrow's framework includes two levels of goals: (a) "system-level goals" and (b) "operative goals." System-level goals are production oriented values, and operative goals are concerned with the beliefs about the efficacy of certain processes. In his theoretical framework, Perrow defines technology as "...a technique or complex of techniques employed to alter 'material' (human or nonhuman, mental or physical) in some anticipated manner" (1965, p. 915). Perrow argues that organizational structure pertains to lines of: (a) authority, (b) responsibility, and (c) communications and that positions and their associated tasks are embedded in the organization structure. Additionally, Perrow suggests that organizational structure tends to be consistent with organizational technology and goals.

The second broad category of theoretical importance involves what Perrow refers to as "the nature of work performed" (p. 966). He suggests that the work of organizational members can be described and analyzed in terms of a set of interrelated tasks. Furthermore, he suggests that the tasks which constitute the work of an organization member (or class of organizational members) are conditioned by and are consistent with specific organizational factors which can be understood in terms of organizational goals, technology, and structure.

It is important to note that the theoretical framework derived from the work of Perrow was not used to guide the investigation. Neither were his categories used to discover the particular factors which condition the work of specialists nor to identify the tasks which comprise their work. Rather, the theoretical framework derived from Perrow's work was used in a secondary stage of analysis to provide useful concepts at the same level of abstraction for organizing and discussing the discovered organizational factors and work-related tasks.

Organizational Factors Which Condition the Work of Specialists

Organizational Goals

The organizational goals which direct the specialist's work are both system-level and operative goals. The system-level goals of schools which are constituted to affect the work of specialists are both similar and different than those designed for the work of teachers (Bidwell, 1965). One important similar goal which guides the work of specialists is that specialists are expected to change and/or stabilize the conduct of students. Specialists, however, are expected to work primarily with students with particular problems; whereas, regular classroom teachers are expected to work primarily with normal students. Without exception the specialists included in the study spend the majority of the instructional part of their work day working with difficult-to-teach students.

The expectations of specialists regarding their work with pupils are operationalized in a variety of ways. For example, learning disabilities specialists are required to prepare "Individual Education Plans" for each of their students. These plans describe the expected level of academic achievement of each assigned student for specific areas of instruction as well as the techniques or methods which will be used. Mrs. Ja, the math specialist, Mrs. S, the diagnostic specialist, and Mrs. O, the Early Childhood Education reading specialist are all expected to raise student achievement levels on standardized tests.

One system-level organizational goal which is associated with the position of some specialists, but not with the position of classroom teacher, is that some specialists are expected to change the conduct of classroom teachers. Four specialists in the study are expected to change teacher conduct in some way. For example, Mrs. D reports that she works in classrooms so that she can serve as a model for the teaching of reading, and Mrs. Ja reports that part of her role as a math specialist involves locating and developing "instructional materials" which will "help" teachers teach math.

As is the case with regular classroom teachers (Jackson, 1968), the organizational context in which specialists work tends to shift their attention away from system-level goals to operative goals. Although most learning disabilities specialists prepare "Individual Education Plans" for most students, the documents do not seem to guide the daily work of these specialists. Even though each of his students presumably has a different "Individual Education Plan," Mr. G is compelled to give most of his students most of the time identical instruction and assignments. Mr. G does not have the time or energy to plan, present, and supervise different lessons for 12 students each day. As Mrs. O and Mrs. D move from classroom to classroom in their respective schools each day, the details of their work schedules command their attention over possible results of future standardized tests or demonstrating model lessons for teachers.

The operative goals which command the attention of specialists tend to vary among specialists. In a similar fashion as teachers, the specialists who spend most of their day in the presence of pupils, and not adults, tend to value their relationships with students. For example, three of the learning disabilities specialists in this study, Mrs. J, Mrs. C, and Mrs. F, work exclusively in their own classrooms and have little contact with teachers and other specialists, or school administrators during the school day. These specialists view their personal relationships with students as important aspects of their work. When talking about their work, these specialists speak in terms of personal problems of their students and the success or lack of success they are having with various students.

Whereas specialists who work in their own rooms are oriented to their students, those specialists who spend most of their day working in the presence of adults, tend to value their relationships with staff members over students. An example will be illustrative. Mrs. Ja, the elementary school math specialist who directs a "Math Lab," has considerable interaction with staff members. Mrs. Ja supervises three aides and works in the school's "Instructional Materials Center" (IMC) along with two other specialists. Furthermore, because of her work location she is in frequent contact with the school's project director and principal. Although Mrs. Ja is attentive to the students in the Math Lab, planning the activities of the lab and meeting with the aides, other specialists, the project coordinator, and the principal command the major part of her work attention.

As is the case with classroom teachers (Jackson, 1968), the organizational goals of special programs concerning the expected work accomplishments of specialists give some general direction to their work without giving much direction to the specific details. The specialists included in this study do work within the general parameters of the organizational system-level goals. Reading specialists teach reading, the math specialist is in charge of the Math Lab, and the learning disabilities specialists provide services to those certified as learning disabled. Furthermore, these specialists tend to provide services to eligible students as defined by the goals of their particular programs. The learning disabilities specialists are careful to include in their programs the "certified" and "placed" students. Mrs. O, the Early Childhood Education reading specialist, is careful to provide services to only children in kindergarten through third grade in her school. Mrs. D, the Miller-Unruh reading specialist, concentrates her attention on those students in the lower quartiles of reading achievement. Those specialists who are expected to change teacher conduct at least continue to talk about the importance of doing so.

Organizational Structure

As noted previously, Perrow (1965) argues that organizational structure has at least three analytically distinguishable components. These are (a) lines of authority, (b) lines of responsibility, and (c) lines of communication. The structural factors which condition the work of school specialists will be discussed first in terms of lines of authority, secondly in terms of lines of responsibility, and finally in terms of lines of communication.

Lines of Authority

Teachers occupy positions in lines of authority which stem from principalships. Teachers regard their school principals as their immediate supervisors and principals consider teachers as their subordinates. Teachers are typically hired, evaluated, and sometimes fired by principals. Furthermore, principals assign teachers to classrooms and students to teachers. In this analysis, lines of authority which are similar, i.e. contain the same type and sequence of positions in a line of authority, are referred to as an authority structure. Employing the previous definition, it can be stated that classroom teachers occupy positions in a school district's principal-teacher authority structure.

Griffiths, Clark, Wynn, and Iannaccone (1962) recommend, the research of Briner and Iannaccone (1966) suggests, and Sarason (1971) in his studies found that school specialists occupy positions in different types of lines of authority than teachers. Using the terminology developed above, these theorists propose that specialists hold positions in different authority structures than teachers. The data in the present study support the writings of these authors. This is to say that school specialists do not hold positions in a district's principal-teacher authority structure.

An examination of the rules which direct the work of the specialists indicates that they work in different authority structures than teachers. Without exception the work of the nine specialists is guided and directed by a set of rules which do not apply to teachers and over which school principals have little control. Minimally these rules specify the area or areas of instruction and the type of students with whom the specialists must work. For some specialists, in some areas of their work, the rules are very specific. For example, the rules regulating the work of learning disabilities specialists specify the minimum and maximum amounts of time these specialists can work with students as well as specifying the maximum number of students the specialists can work with at any one time. For the specialists who work in Title I projects, there are rules regarding the evaluation procedures to be used to assess the effectiveness of the projects. In other cases the rules are less specific, for example, the rules regarding the students with whom the reading specialists Mrs. D and Mrs. O can work and for how long are less specific than for most of the learning disabilities specialists.

The specialists take the rules which guide their work seriously and use special terms when referring to them. Learning disabilities specialists refer to the rules which direct their work as "laws." The reading specialists refer to their program rules as "regulations" and "guidelines." The specialists who are associated with Title I projects refer to their project rules as "guidelines" and "project requirements."

Another indication that the specialists hold positions in different authority structures than teachers is that most (eight out of nine) of the specialists have identifiable district level supervisors. Learning disabilities specialists have district level supervisors referred to as "coordinators," "consultants," and "resource specialists." The titles vary between schools and among school districts, but the function of these supervisors remains the same, i.e., providing support services for and assistance to learning disabilities specialists as well as keeping these specialists informed and in compliance with the "laws." Only Mrs. Ja, the math specialist, does not have an identifiable district level supervisor. Mrs. Ja does, however, meet regularly with a "consultant" from the district's research and evaluation office concerning project evaluation and project writing matters.

It is important to emphasize that the eight school specialists who have district level supervisors regard them as important authorities. An example will illustrate this point. Mrs. H, a learning disabilities specialist, characterizes her relationship with her district level supervisors in the following statement:

> We [the learning disabilities specialists] have mounds of paper work. They [the district level supervisors] make sure we do it in a way that fits the laws . . . in this way we have a great deal of contact with the special education office.

A final indication that the school-based specialists belong to a different authority structure than teachers becomes evident by examining the economic arrangements through which the specialists' positions and programs are funded. Without exception the positions of the nine school-based specialists are supported in full or in large measure by special earmarked funds. The learning disabilities specialists report and other data substantiates that 90 percent of their salaries are paid by special state funds and the remaining 10 percent comes from general district funds. The positions of the Miller-Unruh reading specialists and the Early Childhood Education reading specialists are funded by special monies made available to schools and districts through state statutes. The positions of the specialists who work in Title I programs are funded through federal project grants.

The special funds not only pay the salaries of the specialists, but also provide for program materials, supplies, equipment, and certain services. For example, Mrs. H, a learning disabilities specialist, states:

> I receive about $250 in special funds for supplies and $50 for field trips. All the furniture and equipment was supplied by the special education office when the program was set up.

The field data indicate that the school-based specialists included in the study: (a) work under a different (and a rather specific) set of rules than teachers, (b) most of the time (eight out of nine) have district level supervisors with whom the specialists have regular contact and regard as important figures in their work, and (c) are paid and receive funds for program costs through special state and federal allocations which are not available to regular teaching programs. These data indicate that the specialists work in different types of lines of authority than teachers. Among the specialists the lines of authority are similar and include the specialists and their supervisors. Hence, it can be concluded that specialists work in different authority structures than teachers. It is appropriate to call these authority structures the supervisor-specialist authority structures.

Although lines of authority which involve teachers and specialists have been explored, the lines of authority which include those students who are shared by specialists and teachers have not been considered. In the situations in which no specialists are involved, the students assigned to a teacher are under the direct official authority of the teachers. A teacher has a legal responsibility for assigned students. As noted by Bidwell (1970), teachers must accept all assigned students into their classes and do not have the authority to give their students to other teachers or take assigned students from other teachers. Hence, in most cases, students can be regarded as holding positions in lines of authority which extend from teaching positions. In other words, students hold positions in lines of authority which include classroom teachers and school principals. In the terminology used above, it can be stated that students are part of a district's principal-teacher-student authority structure.

The situation becomes more complicated when specialists and teachers share students. The question arises as to which authority structure do these students belong? Do shared students hold positions in the authority structures which includes teachers, specialist, or both?

A description of a situation will help clarify this issue. All the specialists included in this study (with the exception of Mrs. F, the high school learning disabilities specialist) engage in a practice which one specialist refers to as "giving back my children." Specialists from time to time are called to meetings during the school day, are absent from school because of illness, or cannot make their scheduled sessions with shared students for some reason. On these occasions the specialists "give back their children" to regular teachers. In effect, the specialists cancel their sessions with students. (It should be noted that "giving back students" to teachers is not popular with teachers. Most of the specialists are sensitive to this fact and, consequently, do not engage in the practice regularly.) When a specialist "gives back children," teachers feel compelled to take the students even though the teachers may feel inconvenienced and would rather not do so.

On the other hand, teachers cannot give up their students to another teacher or specialist if the teacher or specialist does not choose to accept the children. As far as not moving students among teachers, this fact is so well understood that it is unthinkable for a teacher to give students away to another teacher, even for a very short time, without the receiving teacher's expressed prior permission. For example, a teacher who is sharing students with a specialist may find a student particularly disruptive during a lesson and send the child to the specialist's classroom thinking that the specialist is the most qualified person to deal with the student's problem. The specialist will likely not return the child to the teacher but will soon inform the teacher that students cannot ever be sent to the specialist without prior agreements. (It should be noted that some specialists make such agreements, but the tendency is for them not to do so.)

The point of this short analysis is to illustrate that students who are shared between a teacher and a specialist, for the most part, can be considered to be associated with lines of authority which involve teachers rather than specialists. This is to say that shared students are part of a district's principal-teacher-student authority structures rather than being included in the supervisor-specialist authority structure.

In summary, it has been argued that specialists and teachers occupy positions in different types of lines of authority, i.e., different authority structures, that students hold positions in lines of authority with teachers and not with specialists, and that these situations are a structural organizational factor which conditions the work of the specialists.

Lines of Responsibility

An examination of the number and quality of the lines of responsibility associated with organizational positions provides another indication of structural factors which condition the work of organizational members. Lines of responsibility are, in many instances, congruent with lines of authority. In hierarchically structured organizations (or in parts of an organization which are hierarchically structured) the lines of responsibility frequently trace the same paths as the lines of authority. In a hierarchically structured organization a superordinate position is connected by formal lines of authority to specific subordinate positions. The individual who holds the superordinate position has specific responsibilities with regard to the individuals who hold the subordinate positions. The same can be said for the individuals who hold subordinate positions with respect to the individual in the superordinate position.

However, lines of authority and responsibility are not always the same. Blau and Scott (1962) suggest that among interdependent organizational units lateral lines of responsibility usually span and connect the different lines of authority. Furthermore, they suggest that these lines of responsibility may not be just informal practices, but "formally established procedure[s]" (p. 184).

In this analysis the concept of lines of responsibility is concerned with two related ideas. First, the concept is concerned with the number of individuals with whom other individuals are expected to work closely. This is referred to as the number of lines of responsibility. These lines may or may not follow official lines of authority. The second idea is related to the quality of the interaction between the individuals who are expected to work closely. Barnard (1938, 1968) suggests that working with "passive" individuals or groups of individuals is considerably easier than working with nonpassive individuals or groups of individuals. The character of the interaction in the concept of lines of responsibility is referred to as the quality of the lines of responsibility.

Elementary school teachers have responsibility for 25 to 30 students each day. Secondary teachers have responsibility for five or six times that number but for considerably shorter periods of time. The lines of responsibility associated with teaching positions, for the most part, are congruent with the lines of authority which involve these positions. Principals have certain responsibilities for teachers and, in turn, teachers have certain responsibilities for students. The lines of responsibility which include the school principal, the teachers, and the students follow the same course as the lines of authority associated with those positions.

Classroom teaching positions are associated with few lines of responsibility which involve other adults. Teachers are formally responsible to school principals and, perhaps, vice principals at secondary schools. Some teachers have responsibilities which involve school specialists of various sorts. Typically, the work of most teachers does not involve formal responsibilities to other teachers. A few teachers become formally involved with team teaching programs or similar arrangements. In these sorts of arrangements teachers do have formal responsibilities to other teachers. However, for the majority of teachers, by far the greatest number of lines of responsibility associated with their positions as teachers involve children and not other staff members.

Teachers, by organizational standards, have a relatively large number of lines of responsibility associated with their positions. However, this broad span of responsibility is tempered by the fact that teachers are responsible for a relatively passive group of individuals, i.e., children. This is not to imply that children always passively comply with the wishes and desires of teachers. However, if teaching positions were associated with 25 to 30 lines of responsibility which involved adults rather than children, it is fair to assume that the quality of the lines of responsibility would be considerably less passive.

The rules under which the specialists work charge them with the responsibilities of working with both teachers and students. The school specialists in this study are expected to coordinate the delivery of remedial instruction with teachers for certain categories of students. The lines of responsibility associated with the positions of the school specialists are, however, not congruent with the lines of authority in their respective schools. Previously it was pointed out that specialists work in different authority structures than those which involve teachers and students. Specialists occupy positions in what has been called the supervisor-specialist authority structure; whereas, teachers and their students occupy positions in what has been termed principal-teacher-student authority structures. Since the school specialists have responsibilities of coordinating their work with teachers and providing instruction to students, the lines of responsibility associated with the specialists' positions span and connect two different authority structures. It should be emphasized that the lines of responsibility which exist between the position of specialist and teacher and specialist and student are not accompanied by lines of authority.

Since elementary school teachers have one supervisor and typically have 25 to 30 students assigned to their classes, it can be assumed that these teachers have 25 to 30 lines of responsibility which involve children and one line of authority which involves another adult, the school principal. These numbers can be used as a basis of comparison for examining the lines of responsibility associated with the positions of school specialists.

For five of the specialists the number of lines of responsibility associated with their positions is less than those typically associated with teaching positions. For one specialist, the lines of responsibility associated with her position are about the same as those associated with teaching positions. The remaining three specialists have considerably more lines of responsibility associated with their positions.

The lines of responsibility which involve specialists are more complex than those which involve teaching positions for several reasons. First, for teachers, the lines of responsibility associated with their positions are congruent with the lines of authority involved with their positions. However, in the case of specialists, the vast majority of the lines of responsibility associated with their positions are not congruent with their authority structure, but span and connect two authority structures. And, secondly, although a majority of the specialists have a slightly lower number of lines of responsibility associated with their positions than teachers, specialists have considerably more lines of responsibility which include adults. The noncongruence of the lines of authority and responsibility, coupled with the fact that specialists are responsible for working with more staff members than teachers, support the conclusion that the lines of responsibility for specialists are more complex than those for teachers.

There is one further reason which supports this conclusion. The majority of lines of authority which involve teachers and students can be viewed as having a dyadic quality (Bidwell, 1973). As part of the dyad, the teacher and student have responsibilities to each other in specific areas. The lines of responsibility which connect specialists with students and specialists with teachers have a triad-like quality. The actions of the specialists with respect to teachers and students must take both parties into consideration. For example, Mrs. H does not schedule students from one teacher's class during spelling lessons because the teacher does not like poor spellers (which includes all of Mrs. H's students) to miss spelling even though the students would be delighted to miss this exercise. In this example the decision of the specialist rests on anticipated reactions of both teacher and student. The triadic character of the lines of responsibility which link specialists, students, and teachers is more complex than the lines of responsibility which involve only classroom teachers and students.

In summary, it has been argued that the specialists have lines of responsibility which span authority structures and have lines of responsibility which involve more staff members than teachers and that these situations are a structural factors which conditions the work of the specialists.

Lines of Communication

Within an organization there are lines of communication which follow the same paths as the lines of authority (Griffiths, et al., 1962). Where lines of responsibility bridge different authority structures (i.e., do not follow the official lines of authority), lines of communication usually follow the lines of responsibility (March & Simon, 1958). When lines of communication follow the lines of authority and/or lines of responsibility these lines of communication are generally referred to as formal lines of communication (Griffiths, et al., 1962). Lines of communication among organizational members which do not follow official lines of authority or responsibility are generally referred to as informal lines of communication. These types of lines of communication are the ones associated with the members of cliques and small friendship groups within an organization (Griffiths, et al., 1962).

The purpose of this analysis is to examine the character and patterns of the lines of communication which are associated with the positions of classroom teacher and school specialist. These may be either formal or informal lines of communication. Of particular interest is an examination of the lines of communication between the specialists and the teachers with whom the specialists share students and an examination of how these lines of communication serve as structural factors which condition the work of school specialists.

Lines of communication between teachers and their school principals are congruent with the lines of authority and responsibility (Griffiths, et al., 1962). Dreeben (1970, 1973) suggests that the communication between teachers and principals is not particularly intense due to the dispersion and isolation of teachers relative to the principal. Lortie (1969) suggests that teachers are not particularly attentive to the wishes and desires of principals because these administrators have few meaningful rewards to attract the attention of teachers.

Teachers usually initiate communications with principals individually in private settings. Principals do the same with teachers but tend to use collective forms of communication with teachers. School bulletins containing notices to staff members from the principal are common in schools. Faculty meetings are another avenue by which principals economically communicate with staff members.

As is the case between teachers and principals, the lines of communication between teachers and their students are also congruent with the lines of authority and responsibility. The lines of communication between teachers and students are relatively simple. Barnard (1938, 1968) notes that the complexity of communication patterns between a formal leader and the members of a work unit are considerably simplified if the leader can communicate with the members of the unit contemporaneously. This is the case with teachers and their students. Teachers typically communicate with their students as a class rather than on an individual basis.

Communication among teachers consumes a relatively small part of their workday due to the demands of their work schedules and their isolation from one another (Dreeben, 1970). However, stable informal friendship groups do exist among teachers and these groups serve as communication links among the teachers in a school (Iannaccone in Griffiths, et al., 1962).

The flow of information along the lines of communication which connect principals, teachers, and students tends to be vertical and downward, i.e., from principals to teachers and from teachers to students (Bidwell, 1965; Iannaccone in Griffiths, et al., 1962); whereas, the flow of information among informal groups of teachers tends to be horizontal (Iannaccone in Griffiths, et al., 1962).

The overall character of the formal lines of communication which involve the school specialists are different than those which involve classroom teachers for several reasons. First, the formal lines of communication associated with teaching positions primarily involves children and not adults. This, however, is not the case with the school specialists. The specialists in the study are expected to maintain formal lines of communication with a substantial number of teachers as well as students. Considering eight of the nine specialists, each specialist, on the average, is expected to maintain formal lines of communication with nearly seven teachers. (Mrs. F, the high school learning disabilities specialist, does not have specific responsibilities regarding the coordination of her work with teachers and, hence, her situation is not included here with the other specialists.) This figure is likely to be at least double that which most teachers are expected to maintain.

Another difference between the formal lines of communication which are associated with the positions of specialist and teacher is that the lines of communication between teachers and their students are more efficient than those which exist between specialists and teachers and specialists and students. The ability of classroom teachers to communicate with students contemporaneously provides for a remarkably efficient communication system. Specialists are not able to communicate contemporaneously with teachers and students. All nine specialists coordinate their work with teachers individually rather than collectively. Because specialists work with small groups of students at different times of the day, the specialists are unable to communicate with all of their students at one time. Hence, because the specialists work with smaller units of individuals than teachers, even though the number of individuals may be less, the formal lines of communication between specialists and teachers and specialists and students are less efficient than those which exist between teachers and their students. Because the specialists are expected to maintain formal lines of communication with more adults than teachers and because the formal lines of communication for specialists are less efficient than those of teachers' (at least insofar as teacher-student communications are concerned), it is reasonable to conclude that the character of the formal lines of communications associated with the specialist positions is different than those generally associated with teaching positions.

Notwithstanding the character of the formal lines of communication which connect specialists to teachers and students, the degree to which specialists are able to establish and maintain convenient lines of communication with teachers with whom they share students varies among the specialists included in this study. Those specialists who are able to engage in regular face-to-face encounters with teachers have a relatively easy time communicating with teachers. On the other hand, those specialists who have few and irregular face-to-face encounters with the teachers with whom students are shared have considerable difficulty in maintaining lines of communication with these teachers.

There are three learning disabilities specialists in this study who have difficulty in maintaining regular lines of communication with staff members including the teachers with whom they share students. These specialists include Mrs. F, Mrs. J, and Mrs. C. These specialists are not itinerant specialists, but conduct all their instructional sessions with students in their own special rooms. Since students individually or in small groups come to these specialists' rooms for instruction, Mrs. F, Mrs. J, and Mrs.

C spend most of their time in their own rooms with students and are isolated from other staff members. This is the situation experienced by most classroom teachers.

However, because of the locations of their rooms, the isolation of these specialists from other staff members seems to be accentuated beyond that of most classroom teachers. In each case the specialists' rooms are located at or very near the rear of their school building complexes and are out of the normal traffic patterns of other staff members and many students. For these specialists, the locations of their rooms place them at a considerable distance from their schools' main offices and staff lounges. Traveling to the offices and lounges during breaks and at lunch time requires more time and effort for these specialists than for most teachers in their schools.

Because these three specialists spend almost all of their work day in their own rooms located in remote parts of their schools, they have little opportunity to interact with other staff members including those teachers with whom they share students. In this regard, Mr. G, who at one time worked in a bungalow at the rear of his school, made the following remark: ". . . when I was over there [in the bungalow] sometimes it would be weeks before we, a teacher and I, could get together and discuss a particular child -- maybe two weeks, maybe three weeks."

There are three specialists in this study who have substantial opportunities for developing and maintaining lines of communication with other staff members. These specialists include Mr. G, a learning disabilities specialist, Mrs. Ja, a math specialist, and Mrs. S, a diagnostic specialist. These three specialists perform most of their work in an assigned location in their respective schools. These specialists cannot be considered itinerant specialists because they work in one location and their students come to them on a regularly scheduled basis. Because these specialists work in a single location in their respective schools, their work situations are similar to classroom teachers and to the three learning disabilities specialists described above. However, different than the three learning disabilities specialists, Mr. G, Mrs. Ja, and Mrs. S work in locations where they can conveniently establish and maintain lines of communication with a variety of staff members including the teachers with whom they share students.

Mr. G, Mrs. Ja, and Mrs. S work in rooms which are centrally located within their schools. Mrs. Ja works in the school's Instructional Materials Center (IMC, i.e., the school library) which is adjacent to and has direct access to the school office and the staff lounge. Mr. G's room is centrally located in his school and is as close to the school office and staff lounge as any other classroom in the school. Furthermore, there are large open interior passageways between Mr. G's room and two adjacent classrooms. Mrs. S's room adjoins the staff lounge but is a fair distance from the school's main office. However, her room is equipped with a telephone which she uses to keep in regular contact with the school's secretary. All three of these specialists work in locations which have a considerably different character than those of the three learning disabilities specialists described previously and different than those of most other classroom teachers.

The central locations of these specialists provide them with relatively easy access to lines of communication with other staff members in their schools. Both Mr. G and Mrs. Ja make regular trips to their school offices to "check" their mail boxes or speak with school secretaries. All three of these specialists generally spend time engaging in informal conversation in their staff lounges before school, during breaks, and after school. Furthermore, because these specialists work in densely populated areas of their schools, they frequently encounter other staff members and these encounters lead to numerous brief conversations throughout the day. For example, as teachers pass through the IMC on their way to the staff lounge, it is not uncommon for them to exchange a few words with Mrs Ja. The large open doorways between Mr. G's room and the two adjoining rooms allow him to engage in short conversations with the neighboring teachers during the day. Since Mrs. S's room serves as storage place for a number of pieces of instructional equipment and other instructionally related materials, as well as being the "check in" location for the aides in the school, Mrs. S not uncommonly engages in brief conversations with the staff members who have occasion to enter her room.

Even though the work of Mr. G and Mrs. Ja, and to a limited extent the work of Mrs. S, is more or less confined to a specific setting, they are exposed to a variety of lines of communication which involve quite different parts of their schools and districts. This rich supply of lines of communication gives them a substantial opportunity to conveniently develop and maintain lines of communication with a variety of staff members including the teachers with whom they share students. The situations in which Mr. G, Mrs. Ja, and Mrs. S work are not typical of classroom teachers and are substantially different from the situations in which the three learning disabilities specialists, described previously, work.

There are three specialists included in this study who have regular and direct lines of communication with the teachers with whom they share students. These specialists include Mrs. D, a Miller-Unruh reading specialist, Mrs. H, a learning disabilities specialist, and Mrs. O, an Early Childhood Education reading specialist. All three of these specialists are itinerant specialists within their own schools. Both Mrs. D and Mrs. O work almost exclusively in regular classrooms. Mrs. D instructs one group each day in her office and Mrs. O meets with a small group daily in the school library. For these two specialists the remainder of their work with students is performed in regular classrooms. Mrs. H divides her time almost equally between working in regular classrooms and working in her own room. During certain times of the day she assists "certified" students in their regular classrooms. At other times of the day she "pulls" students into her own room.

The work situations of these specialists bring them into direct contact everyday with most of the teachers with whom they share students. Mrs. O works in nine different classrooms daily which gives her direct contact with nine different teachers. Mrs. D works in ten different rooms which gives her regular contact with ten teachers. Both Mrs. O and Mrs. D are in each classroom only once each day; however, in several classrooms they work with several different groups of students. Mrs. H only works in three different classrooms which gives her regular and direct contact with three of the four teachers with whom she shares students. In two of these classrooms she works twice each day and in the other she works only once.

In their daily work in classrooms, these specialists are able to easily and regularly exchange information with the teachers with whom they share students. These exchanges are not lengthy and are sandwiched during the time after the specialists enter the rooms and before they begin working with students or during the time after the specialists complete working with students and before they leave. Sometimes these exchanges concern specific students. Other times they involve arranging temporary changes in classroom activities.

In their movement within their schools each of these three specialists has a regular travel pattern. These patterns include brief stops between certain sessions in classrooms at their school offices to check their mail boxes, pick up phone messages from school secretaries, and, perhaps, make or return phone calls. Furthermore, the travel patterns of these specialists includes regular stops in their staff lounges during morning and afternoon breaks as well as during lunch hours. While in the staff lounges the specialists have the opportunity to exchange information with teachers concerning students and temporary schedule changes.

In summary, it has been argued that the complexity of the lines of communication associated with the positions of school specialists as well as the differences in availability of lines of communication associated with various positions of school specialists are important structural factors which condition the work of school specialists.

Organizational Technology

Perrow (1965) argues that the processes which organizational members use to alter materials (nonhuman or human) rest on a "knowledge of the nature of the raw material[s]" which are to be altered (p. 916). According to him, the "knowledge of the nature of the raw material[s]" held by organizational members is technology. Furthermore, he asserts that organizational technology is reflected in the specialized skills and devices employed by organizational members. He states that the skills employed and the devices used to alter materials are "fabricated or created to serve the technology" (p. 916). Additionally, he asserts that if skills cannot be learned and devices cannot be created from a purported technology, then authentic organizational technology does not exist.

Teachers do not have a shared technical vocabulary composed of specialized concepts peculiar to the occupation of teaching (Lortie, 1966). Furthermore, teachers hold common sense assumptions about the processes which constitute their work with students (Lortie, 1966). Dreeben (1970) points out that the technology of teaching is not well understood and is underdeveloped when compared to other occupations. He argues that teaching processes are not "mindless" but are nevertheless imprecise. A reasonable appraisal of the organizational technology which stands behind the work of teachers is that the technology has a common sense quality and is ambiguous in character.

The Technology of School-Based Specialists

It is reasonable to expect that the work of specialists would be guided by an organizational technology not known or easily accessible to organizational members considered as nonspecialists. Similarly, it is reasonable to expect that the work of school specialists would rest on different and more highly developed technologies than those which guide the work of regular classroom teachers.

Evidence for the presence of a unique organizational technology among a group of organizational members can be obtained by examining how the members talk and think about their work and by examining the assumptions the members hold regarding the processes of their work.

Lortie (1966, 1973) proposes that the presence or absence of a "technical culture" among the individuals in the same occupation can be determined by examining the language the members use in talking about their work with one another. Lortie (1966) states that the presence of a technical culture is indicated by the "existence of some set of shared and special terms [which] is the mark of a specialized way of looking at things" (p. 58).

An analysis of the field data reveals that four of the nine specialists do not generally use a technical vocabulary when talking about their work involved with students. These specialists include: Mrs. C, Mrs. O, Mrs. D, and Mrs. F. An example will be illustrative.

Mrs. O describes her work in the following way:

> When I work with these children, I don't work too much with phonics because the time is too short. Most of these children are either having learning problems in the second grade or they're first graders just learning to read. So I work mostly with word recognition. I use flash cards and word lists and little games or

> little charts where the children use cards to make sentences and things like that.

Mrs. O's characterization of her work is nontechnical in nature and is not much different than the way primary teachers, or even parents, would describe their work in teaching beginning readers or assisting children who have difficulty reading.

The statements of these specialists support the conclusion that the work of at least some of the specialists does not involve a substantially different organizational technology than that which guides the work of teachers.

An analysis of the data reveals that five of the nine school-based specialists do, on occasions, use specialized concepts and a technical vocabulary in describing their work which involves students. These specialists include Mrs. Ja, Mrs. J, Mrs. H, Mr. G, and Mrs. S. An example is selected to illustrate the specialized language of these specialists.

Mrs. S writes formal memoranda regarding the results of her diagnostic assessments of students and presents these memoranda at "staffings." An excerpt of one of her memos is as follows:

> R's mean score on the ITPA shows 29.8. This is a weak average but still is within the average range. His weakest subtest appears to be auditory and visual reception (24, 23) which are significantly below the national mean of 36. Other weak areas are visual association and memory, auditory association and memory, verbal expression and grammatic closure. His main area of strength was manual expression. . . .

Although Mrs. S describes and talks about her work using specialized concepts and a technical vocabulary, she provides ample indications that specialized concepts do not guide her instructional work with children in any substantial way. In spite of the detailed written diagnostic statements Mrs. S develops for each of her students, there is not any evidence that these documents guide her work with students. Most of her students, regardless of diagnosis, seem to receive about the same type of instruction. They all spend some time manipulating teaching machines of various sorts, each spends some time "doing worksheets," most spend some time reading to Mrs. S's aide, and all of the students spend time playing "educational games" with Mrs. S. What has been characterized for Mrs. S regarding the discrepancy between the way she talks about her work and the way in which she conducts instruction is also true for the other specialists who describe and talk about their work using specialized concepts and a technical sounding vocabulary.

Heider (as discussed in Baldwin, 1967) has investigated the common sense notions, or theories, people hold regarding human actions. One aspect of Heider's work is concerned with learning, particularly the learning of children. According to Heider the common sense notion of learning involves the ideas of intentions, actions, motivation, ability, and drill. A summary of Heider's description of the common sense theory of learning is presented below.

Human actions are "intentional and goal directed" (Baldwin, 1967), p. 10). For individuals to fulfill their intentions, they must be motivated and have the necessary ability. Motivation and ability are spoken of in terms of the words try and can. Baldwin, in discussing Heider's work, states:

> . . . try and can describe the two necessary conditions for action. If a person can do something and tries to do it, he will succeed in doing it. . . . If a person does not produce some results, it may not be because he has not tried, but because he could not do it, or because both were lacking (p. 57).

Furthermore, the common sense notion of can holds that an individual can accomplish a task only if the difficulty of the task is not too great and the personal ability of the individual is not too low.

In the common sense theory of learning, intentions and actions are related to learning through the notion of repetition. Repetition or drill of certain actions, particularly those which are concerned with memorization, is considered to lead to learning.

An analysis of the field data produces direct evidence that all nine of the specialists hold common sense views of student learning. Specifically, the common sense notions of can, try, and drill are concepts with which they approach their work. Some examples will illustrate how the specialists think about their work in terms of these concepts.

Mrs. H describes a young girl who is having difficulties in a second-grade class. Mrs. H states:

> She can read at the twelfth grade level, but won't try to do anything else. She stays in at recess and reads. She does not color within the lines. She does not follow directions.

Regarding the importance of practice and repetition, Mrs. D states:

> My theory is that if I'm going to see a kid and do any good with him, I have to see him every day. . . . I just figure that if I'm going to work with them at all, I'm going to work with them every day, you know, in order to accomplish anything.

These examples are cited to illustrate that the specialists assume the common sense notion that students can accomplish a task, assuming that the task is not too difficult or the student's ability is not too low, if the student will try to accomplish the task. And if the student practices a task, learning will take place.

Although all nine specialists hold a common sense theory of student learning, various specialists emphasize different aspects of the theory. For example, Mrs. S clearly subscribes to the notions of try and can, yet she is with her students for such short periods of time that repetition is not an important aspect of her work with students. Mr. G, on the other hand, emphasizes motivation and repetition. He establishes tasks for most of his students at levels where they can perform the tasks relatively easily. Mr. G actively encourages students to engage in the tasks and repeat the tasks regularly.

It has been argued that the specialists do not have a unique vocabulary of specialized terms and concepts which guide their work with students. Furthermore, it has been argued that these same specialists hold common sense theories regarding student learning. These are the same types of indicators which led Lortie (1969) to conclude that teachers do not have a "refined technical culture" (p. 29) and that common sense assumptions from the foundation on which teachers understand their work with students (Lortie, 1966). It is reasonable to conclude that the organizational technology which guides the work of specialists is not substantially different than that which guides the work of teachers.

Not only is the organizational technology which forms the foundation of the work of specialists not substantially different from that which guides the work of teachers, but the specialists recognize important limitations in the organizational technology which guides their work. Several examples will illustrate the type of remarks the specialists make which indicates that they recognize limitations in the technology which form the basis of their instructional work with students, particularly those students who are difficult to teach.

In speaking about an active sixth-grade boy, Mr. G states:

> M's activity really bothers me. It's all in a day's work, I suppose. I wonder how much good this program is having on M. He has shown some improvement in math, but little in reading. I realize that I am requiring him to sit and do meaningless activities some of the time. M's ok in one-to-one, but has difficulty working by himself.

Mrs. F expresses the same type of frustration as she talks about her lack of success with several students. Mrs. F states:

> I still have a couple who I have worked with for an hour a day for three years. They have made six months progress.

Mrs. F goes on to describe one of these students.

> H is a super-bright kid. I've worked with him in every method I can think of in reading in the last few years. Well, he's a twelfth grader now and I had him as a ninth grader. H's gained six months, maybe. He reads at about third grade. That's barely reading; it really is. It's [the special reading instruction] not doing him any good. It kills me.

In summary, it has been argued that the organizational technology which guides the work of the specialists is not substantially different than the organizational technology which guides the work of teachers and that the absence of a unique and superior technology is an organization factor which conditions the work of specialists.

The Interaction of Organizational Structure and Goals

In terms of organizational structure specialists occupy positions in different authority structures than teachers and students. A consequence of the organizational structure is that the specialists do not have formal authority over teachers and do not have permanently assigned students. Furthermore, teachers have more authority over students than specialists. The organizational goals which direct the work of the specialists, nonetheless, charge them with the responsibility of providing regular instruction for specific categories of students. Hence, specialists find themselves in a problematic situation.

All of the specialists in varying degrees experience difficulties in getting access to students. The one exception to this generalization is Mrs. F, the high school learning disabilities specialist. Since her schedule and student assignments, along with the other teachers in the high school, are made administratively, she, strictly speaking, does not encounter the problematic situation of getting access to students. However with the exception of Mrs. F, whether a specialist is a learning disabilities specialist or a specialist associated with a specially funded project or program, works in a regular classroom, in a special room or in a "laboratory," getting continued and regular access to students is experienced by the specialists as problematic.

One project specialist interviewed reports that getting access to students in classrooms can be exceedingly difficult. This specialist states that teachers do not, however, directly tell specialists that they are unwelcome to enter their classrooms and work with groups of students. Teachers use more indirect, yet effective methods. The specialist mentioned above states:

> . . . you go into classrooms and they're showing films or they're out to P.E. . . . All these little signals add up to "I don't want you."

Even though regular classroom teachers are, in principle, in favor of sending certified children to learning disabilities specialists, these same teachers are only in favor of certified children leaving their classes and lessons at certain times of the day. Even though children may be "certified" to receive the services of a learning disabilities specialist, regular classroom teachers still retain a feeling of responsibility for certified students' academic progress and social development. Classroom teachers do not want certified students to get behind in their regular classroom assignments or miss certain classroom social activities. Consequently, regular classroom teachers remain somewhat reluctant about releasing certified students to learning disabilities specialists. Teachers only release certified children to learning disabilities specialists at times when they feel certified students will not "miss" anything of particular importance. This position of regular classroom teachers critically restricts the access of learning disabilities specialists to certified students.

Not only do teachers make access of specialists problematic, but the students themselves can add similar difficulties. Students can hinder or resist the services of specialists in several ways. Specialists who work in their own rooms are at the mercy of the students to remember to arrive at scheduled times. Specialists know, in the long run, that the teachers cannot be counted on to regularly send students. Hence, the specialists must rely on students to remember. However, students do not always come to a specialists' room at the scheduled time. A student engaged in a classroom activity may not want to set the activity aside and to go a session with a specialist. On such occasions, students are likely to tell the specialist that they forgot about the special session.

Another way in which specialists must depend on students occurs in regular classrooms. Itinerant specialists move from classroom to classroom and generally do not spend very much time in any one classroom and therefore instructional efficiency becomes critical. If the students are not ready with materials in hand when the specialists arrive in the classrooms, the specialists are forced to spend a large percentage of their time in classrooms rounding up both students and materials and a relatively small percentage of time engaged in instruction.

The Interaction of Organizational Technology and Goals

The organizational technology which guides the work of the specialists in their instructional work with students is not substantially different than that which provides the foundation of the work of teachers with students. A consequence of this organizational factor is that the specialists do not have a significantly higher level of personal expertise or technical knowledge than teachers in teaching difficult-to-teach students. Mrs. D acknowledges this situation when she states:

> This school has been a Title I school and we have a lot of auxiliary personnel [specialists]. . . . There's this kind of feeling that things would be better if we didn't have auxiliary personnel and we put them all back in the classroom and we cut class size back. I think that there is this kind of feeling *which very well may be justified* . . . If we took all these people and just gave them a class and cut our classes down to 20, then we wouldn't need the auxiliary personnel. (emphasis added)

Notwithstanding the level or quality of technical knowledge specialists hold, the organizational goals which guide their work direct them to significantly raise students' academic performance levels in specific areas. Hence, the specialists find themselves in a second problematic situation. The problem is how to raise the achievement levels of difficult-to-teach students in the absence of superior and unique technical knowledge. Mrs. D clearly indicates, in the following statement, that she and the other specialists on her school's auxiliary services committee keenly feel this problem in their work. Mrs. D states:

> . . . it's like figure out what's wrong [with the child] and cure it. Well, nine times out of ten it's not going to be that simple. . . . When you have a committee you are somehow supposed to cure the problem with some expertise. . . . Well, you know, it's just not going to happen that way. . . . Getting shoes, that's no problem. But when teachers ask: "Why is he tearing my room down everyday? and you come up with some reasons and you say: "Let's try behavior modification or let's try this or let's try that." . . . Well, that's not what the teachers want.

The Interaction of Organizational Structure and Technology

That the specialists hold positions in different authority structures than teachers has an important consequence for the specialists. By virtue of holding positions in *supervisor-specialist* authority structures the specialists are accorded the formal status of *specialist*. The specialists receive the specialist status because certain symbols and benefits are granted to specialists associated with *supervisor-specialist* authority structures which are not granted to teachers in *principal-teacher-student* authority structures. Some examples will illustrate how *specialist status* is conferred on the specialists because they hold positions in their respective *supervisor-specialist* authority structures.

All nine of the specialists "have their own budgets." This is to say that each has control over a certain amount of discretionary funds. None of the specialists has full-time responsibility for a class of students. (Again, Mrs. F, the high school learning disabilities specialist, is an exception here.) All the specialists work with smaller groups of students than teachers. Six of the specialists are exempt from school duties, two have limited duties, and one volunteers to stand duties. Five of the specialists have private offices or work in office-like settings. Two of the specialists have personal telephones on their desks. All of the specialists are expected to work with many more adults than teachers.

Even though the organizational structure confers the status of specialist on the specialists, the organizational technology does not. As stated before, the specialists do not have at their disposal a more valid and reliable technology than teachers for teaching difficult-to-teach students. However, the specialists have responsibilities for coordinating their work with teachers. Hence, the specialists face the problematic situation of how to structure their relationships with teachers when their technical abilities do not match their specialist status.

Mrs. D quotes a general remark made by teachers which virtually all specialists encounter from time to time. This remark captures the essence of the relational problem which the specialists face. Mrs. D states: "Every once in awhile you'll hear: 'Well, I could teach six [of those] kids too!'" In this comment the teachers express, at the same time, both a certain amount of envy of specialists and a certain degree of contempt for specialists -- envy because the status associated with the positions of specialists and contempt because the teachers feel that specialists do not have a superior technology useful for teaching difficult-to-teach students.

The Tasks in the Work of the Specialists

The interaction of various aspects of the organizational variables produces certain ongoing problematic conditions for the specialists. The tasks which constitute the work of the specialists can be viewed as responses to these continuing problematic situations.

Three categories emerge from the field data which can be understood as analytically distinguishable categories in the work of the specialists and as responses to the problematic situations experienced by the specialists. The tasks which constitute the work of the specialists include: (a) Getting students, (b) structuring relationships with teachers, and (c) teaching difficult-to-teach students.

The task of getting students can be understood as a response by the specialists to the problematic situation created by having the responsibility for providing instruction to difficult-to-teach students yet without permanently assigned students or having clear authority over students or teachers. The task of structuring relationships with teachers can be viewed as a response of the specialists to the problematic situation of holding specialist status yet not having superior technical knowledge. The task of teaching difficult-to-teach students can be viewed as a response by the specialists to the problematic situation of having the responsibility of raising the academic achievement levels of difficult-to-teach students yet not having access to a superior technology.

Although the specialists do not necessarily think about their work as being composed of three separate and distinct tasks, the specialists do have unique names for these three tasks. All of the specialists, with one exception, think and talk about getting students in terms of "scheduling students," "developing my schedule," and "changing my schedule." The exception is Mrs. F, the high school learning disabilities specialist, whose situation was discussed earlier. For the other eight specialists, the activities involved with getting students consume a considerable amount of energy and attention.

The specialists think and talk about structuring their relationships with teachers in terms of "working with teachers." For some specialists the activities involved with working with teachers consume more of their attention than others. As might be expected, the itinerant specialists Mrs. D, Mrs. O, and Mrs. H, spend more time working directly with teachers than the other specialists. However, for all of the specialists the nature of their relationships with teachers is of concern.

The specialists think and talk about teaching difficult-to-teach students in terms of "seeing students," "helping students," and "working with children." With the possible exception of Mrs. S, who works with relatively few students for a comparatively short period of time each day, and Mrs. Ja, who primarily supervises aides who work directly with students, teaching difficult-to-teach students consumes the vast majority of the specialist's workdays.

Although the tasks which constitute the work of the specialists can be understood as responses to similar problematic conditions, it can be expected that the range and variety of responses of the specialists will be constrained and conditioned by the organizational contexts in which they work. Since the specialists hold similar organizational positions in similar organizations, it can be expected that the tasks which constitute their work will be similar.

The Task of Getting Students

For the specialists the task of getting students is oriented to securing regular and orderly access to students. Access to students involves obtaining the permission of teachers for the specialists to work in classrooms with students and/or the consent of teachers to release students to work with specialists in locations other than in classrooms. The problems the specialists experience in getting access to students have already been discussed. However, one aspect of the problem needs emphasizing.

The specialists find that they cannot command teachers to give them access to students. One specialist interviewed notes: "[A] resource person [a specialist] is a powerless authority. . . she cannot tell anybody that this or that must be done." Another specialist interviewed notes that when she first became a specialist she unilaterally established a schedule but soon found that teachers in the school did not automatically give her access to students. The specialist states:

> [When I first became a specialist] the biggest stumbling block was getting into classrooms. The teachers would shut their doors [which clearly meant] I don't want you; stay away from me.

The task of getting access to students is accomplished through what the specialists refer to as scheduling. A specialist's schedule can be viewed as a coordinating structure which links two authority structures, the supervisor-specialist and the principal-teacher-student authority structures, and a number of lines of authority. March and Simon (1958) state that "A schedule is simply a plan, established in advance, that determines what tasks will be handled and when" (p. 160). The specialists' schedules specify the time of the day when the specialists will provide instruction to students or groups of students, the duration of the instructional periods, and, in the case of the itinerant specialists, the location where the instructional services will be given. The specialists' schedules may or may not specify which students will be served and usually do not indicate explicitly what activities will take place. Hence, in the terms of March and Simon, a specialist's schedule is a pre-established coordination plan indicating when and where certain activities will take place but not necessarily which students will be involved with the activities or what the nature of the activities will be.

The simplicity of the specialists' schedules is deceiving. The specialists' schedules, which can be considered as symbolic representations of having regular and orderly access to students, do not readily disclose the processes involved in the task of getting students or the factors in the work contexts of specialists which condition the processes. In the next section, the task of getting students will be examined in terms of the processes the specialists employ in establishing their schedules and the factors in their work contexts that come to bear on the scheduling process.

The Process of Scheduling

The inability of the specialists to command access to students, coupled with the job requirements of the specialists to provide remedial instruction, leads the specialists to negotiate with teachers for access to students. Strauss, Schatzman, Erlich, Bucher, and Sabshin (1963) and Schatzman and Bucher (1964) suggest that in certain work contexts individuals engage in negotiations as a patterned activity to establish a division of labor. Strauss, et al., describe negotiations as a "process of give and take, of diplomacy, of bargaining" (p. 148). Schatzman and Bucher characterize the process as one involving "to give and to get" (p. 273). Strauss and his associates speak of the results of negotiations as "agreements," "understandings," "contracts," "compacts," and "pacts" between individuals (p. 163). Furthermore, these theorists argue that an agreement or understanding reached may be stated explicitly or may remain implicit.

The writings of Strauss, et al., and Schatzman and Bucher suggest that, as a mode of establishing a division of labor, negotiating tends to occur in work contexts where individuals are expected to coordinate their work and where the rules of coordination are not and/or cannot be specified with precision. More specifically, the writings of these theorists suggest that in work contexts in which practitioners are expected to coordinate their work with mutual clients, the practitioners will negotiate a division of labor with respect to the coordinated aspects of their work with clients because areas of responsibility cannot be described precisely.

One itinerant specialist reports that she has initiated reading programs in four different schools. The quotation below illustrates how she negotiates access to students by offering exchanges with teachers:

> Anytime the teachers need something, I give it to them and help them with it. I get X number of dollars for supplies and I buy things that I give to teachers. A teacher may come and say: "I have Johnny Jones and I really need something special for him. What do you have?" So we will look through my materials and I'll say: "Oh, this is just what you need," or I'll say: "I think that I know just the thing that might turn Johnny on." The teacher will say: "Can I have that?" and I'll say: "Sure, you can have it." So I'll give them the materials. I don't worry about supplies and materials. There's always going to be materials around. That's the way I start it and the teachers keep coming back again and again and the next thing you know they want me in their classrooms. I've found that it is an effective way of getting into the classrooms. You have to be diplomatic, and if you don't do it on those terms, you're not going to make it.

To obtain regular and orderly access to students in or out of classrooms, the specialists offer exchanges and reach understandings with the teachers involving four different aspects of scheduling. These aspects include: (a) the provision of a variety of noninstructional services to teachers, (b) when and for how long specialized instruction will be provided to students, (c) for whom and for how many students will specialized instruction be given, and, (d) what the content of the specialized instruction will be.

The quality of negotiation of the specialists with teachers varies among the specialists. Not all of the specialists offer the same exchanges and reach the same agreements with teachers. There are three important factors in the work contexts of the school-based specialists which condition the nature of exchanges made and agreements reached between the specialists and teachers. These are: (a) the supply of exchangeable or negotiable resources available to the specialists; (b) the quality of the lines of communications between the specialists and teachers; and, (c) the number of lines of responsibility associated with the specialists' positions. Not only do these three factors condition the nature of the schedule building process, but also they have an effect on the character of completed schedules.

The resources which specialists have at their disposal to negotiate or exchange with teachers for access to students can be divided into two related categories. These are: (a) time which can be allocated to teacher for both instructional and noninstructional purposes; and, (b) materials, supplies, equipment, and the like which can be loaned or given to teachers. The specialists vary in the amount of control they have over how their time is allocated; similarly, the specialists vary in the amount of control they have over material resources. The availability of both types of resources to the specialists depends on the rules and/or the interpretations of the rules which regulate their work. The rules, in turn, are associated with the formal lines of authority which link the specialists with their supervisors.

Considering the supply of resources, time, materials, and equipment available to the specialists for negotiating access to students, the specialists can be divided into two categories. One category includes the specialists who have only modest supplies of negotiable resources. Included in this category are the specialists associated with learning disabilities programs, Mrs. C, Mrs. J, and Mr. G, with the exception of Mrs. H. The second category includes specialists who have ample supplies of negotiable resources. This category includes the specialists associated with specially funded projects and programs, Mrs. D, Mrs. O, Mrs. Ja, Mrs. S, and one learning disabilities specialist, Mrs. H.

The work of Strauss, et al. (1963) and Schatzman and Bucher (1964) suggests that a necessary condition for negotiation among individuals in an organization is person-to-person interaction or, in other words, established and regular lines of communication. Previously the nature of the lines of communication associated with the specialists' positions was discussed. There it was noted that some specialists have direct and regular lines of communication with teachers and other staff members while others do not. The itinerant specialists, Mrs. D, Mrs. O, and Mrs. H, can be viewed as having convenient lines of communications with teachers and other staff members; whereas, Mrs. C, Mrs. J, and Mrs. F can be said to have comparatively inconvenient lines of communications with other staff members and teachers. The specialists, Mrs. Ja, Mrs. S, and Mr. G, whose communications patterns with teachers lie in between the communications patterns of the itinerant specialist and the isolated learning disabilities specialists, can be viewed as having moderately convenient lines of communications with the teachers with whom students are shared yet as having relatively convenient lines of communication with staff members in general.

Regular and orderly access to students is also conditioned by the number of lines of responsibility associated with the specialists' respective patterns. Mrs. D, Mrs. O, and Mrs. Ja have at least twice the number of lines of responsibility associated with their positions as do the other specialists included in the study sample. It is useful to refer to Mrs. D, Mrs. O, and Mrs. Ja as having broad spans of responsibility and the other specialists, Mrs. C, Mrs. J, Mrs. S, and Mrs. H as having narrow spans of responsibility.

With respect to developing a schedule, the specialists can be categorized in a three-fold table. Figure 2 organizes the specialist according to their supplies of negotiable resources (ample or modest), their spans of responsibility (narrow or broad), and their quality of lines of communication with teachers with whom students are shared (convenient, moderately convenient, or inconvenient). The table produces 12 categories. Considering the eight specialists who negotiate schedules in terms of the three categories of factors, they fall into six different categories. Although not all categories are filled, a pattern emerges along a continuum concerned with the degree of frustration specialists experience with the scheduling process.

At one extreme is Mrs. H who has an ample supply of negotiable resources, a narrow span of responsibility, and convenient lines of communication with teachers. She is the specialist who experiences the least frustration in scheduling students. She is also the specialist who engages in the most visible number of negotiations. When in the presence of the teachers with whom she shares students, Mrs. H's conversations are punctuated with such phrases like:

> Do you want me to . . .? Can I do that for you? When you have your class study that, do you want me to . . .? It's up to you, and, Do you think you'll be able to handle him? . . . I'll take him tomorrow.

Mrs. H's school principal, Mr. R states: "No job is too menial for Mrs. H . . . she always subjects [subordinates] herself to the teachers." One time Mrs. H mentioned to the observer that she might be mistaken for a classroom aide.

In scheduling her time, Mrs. H allots time to both teachers and students. The teachers who have accepted more certified students in their classes get more of Mrs. H's time. Also, Mrs. H schedules more time to students who she feels need more assistance.

Mrs. H's small span of responsibility, convenient lines of communications, and ample supply of resources allows her to make changes in her schedule relatively easily. These changes include

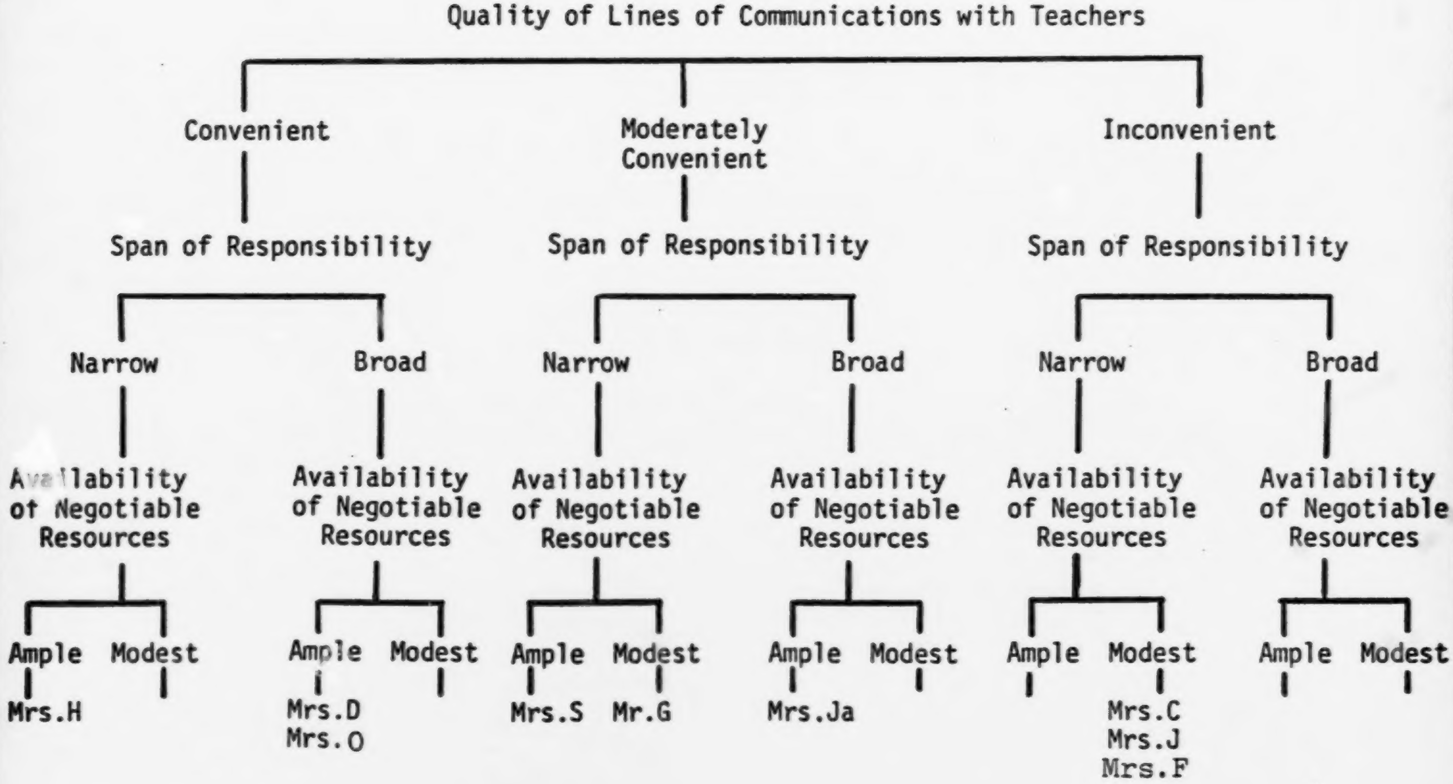
Quality of Lines of Communications with Teachers
Convenient
Moderately Convenient
Inconvenient
Span of Responsibility
Span of Responsibility
Span of Responsibility
Narrow
Broad
Narrow
Broad
Narrow
Broad
Availability of Negotiable Resources
Availability of Negotiable Resources
Availability of Negotiable Resources
Availability of Negotiable Resources
Availability of Negotiable Resources
Availability of Negotiable Resources
Ample
Modest
Ample
Modest
Ample
Modest
Ample
Modest
Ample
Modest
Ample
Modest
Mrs.H
Mrs.D
Mrs.O
Mrs.S
Mr.G
Mrs.Ja
Mrs.C
Mrs.J
Mrs.F

Figure 2. A categorization of the specialists according to the quality of lines of communications they have with teachers, their spans of responsibility, and their supplies of negotiable resources.

the time she will work with various students in various locations, the students she will work with, and the instruction she will provide. Mrs. H's ability to change her schedule relatively easily produces what might be called a "flexible schedule." Mrs. H states: "I'm the most flexible person in the school because the teachers cannot move."

Although Mrs. H has considerable latitude in negotiating access to students, she does place a firm limit on her negotiations. Mrs. H will not provide any instructional services for teachers who do not have certified students assigned to their classes.

At the other extreme of the frustration continuum are Mrs. C, and Mrs. J. Getting access to students by Mrs. C and Mrs. J can be characterized more as frustration than negotiation. Mrs. J views teachers as not "understanding" the needs of certified students. Teachers who share students with Mrs. C characterize her as "uncooperative" and "over protective." Mrs. C's school principal feels that Mrs. C does not realize how disruptive her schedule is to teachers.

The specialists engage in little negotiation with the teachers with whom students are shared. The rules which circumscribe the work of Mrs. C and Mrs. J provide them with little latitude to negotiate smooth access to students. Inconvenient lines of communication exaggerate the situation. In the one area where negotiations are possible, i.e., the content of the specialized instruction, the difficulties the specialists and teachers have with regular and direct communications almost preclude negotiations in this area.

The specialists attempt to vary the amount of time students are scheduled for specialized instruction. Students with "greater needs" are scheduled for more instruction. The specialists schedule small groups of students in the special rooms at one time, usually no more than five. Because different students are scheduled for different amounts of time, students may come and go from the rooms at different times.

Mrs. C and Mrs. J tend to protect their domains of professional authority as vigorously as do teachers. Both learning disabilities specialists refuse to provide assistance to any student except those few who are "certified" and "placed." On one occasion, when Mrs. J's principal unilaterally assigned her to work with some noncertified students, she contacted her district supervisor and reported what the principal had done. When the supervisor contacted the principal, the principal immediately retracted his assignment. Furthermore, both Mrs. J and Mrs. C refuse to see certified students except at scheduled times. If teachers send students to the specialists because the children are having "bad days," the specialists will inform the teachers that this cannot be done except if prior assignments have been made.

The specialists Mrs. D, Mrs. C, Mrs. S, Mr. G, and Mrs. Ja hold positions on the frustration continuum between the extremes. In relationship to the extremes, they experience intermediate amounts of frustration in scheduling students. Space limitations do not permit a complete analyses of these cases. Although there are no specialists included in the study who are in the category modest supply of negotiable resources--inconvenient lines of communications with teachers--broad span of responsibility, it is presumed these specialists would experience more frustration and have more difficulty in getting access to students than any of the specialists included in the study.

The Task of Structuring Relationships with Teachers

The specialists find their relationships with teachers to be problematic. This point has been discussed previously, but it is important to emphasize again. The problematic character of specialist-teacher relationships is illustrated in the following quotations. One upper-grade reading specialist, who was interviewed, notes:

> Last year [when I first began here], at a meeting of the upper-grade teachers, one teacher said: "Just wait, we'll get rid of you."

Mrs. A, Mrs. S's district supervisor, characterizes the feeling of teachers toward specialists as one of actual or potential "resentment." Mrs. A states:

> There can be a feeling of resentment among the teachers toward someone coming in and telling them how to do their jobs. That's why we have found, over a period of time, that specialists have to be a little more flexible.

Mrs. A, in her statement, implies that classroom teachers tend to resent specialists because, in the eyes of the teachers, the specialists are unable to provide useful technical knowledge yet hold specialist status.

Although the specialists find their relationships with teachers problematic, they prefer the situation would be otherwise. Problematic relationships with teachers can make access to students difficult. Furthermore, the specialists, similar to most people, do not like to be resented or disliked, particularly by the people with whom they are expected to work closely.

In general, the problematic relationships specialists have with teachers produce interpersonal tensions between the teachers and specialists making it difficult for the specialists to work closely with the teachers with whom students are shared. Hence, for the specialists, the task of structuring relationships with teachers is oriented to managing interpersonal tensions between themselves and teachers.

The Process of Managing Interpersonal Relations

The writings of Homans (1961) suggest that individuals who are able to demonstrate their acceptance of the norms of the group of individuals with whom they work will experience less interpersonal tension between themselves and the members of the group than individuals who are unable to demonstrate their acceptance of the group norms. In line with Homans' writings, the specialists who are in positions to demonstrate their acceptance of the norms teachers hold for collegial relationships are better able to manage interpersonal tensions between themselves and teachers than the specialists who are less able to demonstrate their acceptance of the norms.

Some of the important norms that teachers hold regarding collegial relationships are listed below:

1. Teachers should not intrude into the classroom affairs of other teachers. Becker (1953) notes that teachers consider themselves as the "legitimate authority in the classroom . . ." (p. 129). Intruding into classroom affairs include: Imposing one's views of teaching on other teachers (Lortie, 1975); openly criticizing or challenging other teachers (Becker, 1953); providing unsolicited assistance (Lortie, 1975); and entering the classrooms of other teachers while they are teaching (Becker, 1953).

2. Teachers should help one another. They should share "ideas and work supplies" (Lortie, 1975, p. 194). They "should respond to . . . requests for help but not expect special privileges for doing so" (Lortie, 1975, pp. 194-195).

3. Teachers should be "friendly," "sociable," "open," "reassuring," and "warm" and "not manifest snobbery or arrogance" (Lortie, 1975, p. 194).

4. Teachers should "hold up their end of the less pleasant school-wide tasks" (Lortie, 1975, p. 193).

5. Teachers should be allowed, but not forced, to work together and should not be penalized if they choose to work alone (Lortie, 1975).

The ability of the specialists to demonstrate their acceptance of the collegial norms of teachers depends on the specialists' supply of negotiable resources and the quality of the lines of communications they have with teachers. Recall that the specialists who have an ample supply of negotiable resources are less constrained by rules and regulations than the specialists who have a modest supply of negotiable resources. Furthermore, the specialists who have convenient lines of communications with teachers are in a better position to visibly demonstrate their acceptance of the collegial norms than the specialists who have moderately convenient or inconvenient lines of communications with teachers.

In order to understand how the organizational factors of availability of negotiable resources and quality of lines of communication condition the way the specialists manage their interpersonal relations with teachers, a two-fold table can be constructed. Figure 3 organizes the specialist by two factors. One factor in the table is the availability of negotiable resources (ample or modest); the other factor is the quality of lines of communication with the teachers with whom students are shared. The table produces six categories. Considering all nine specialists included in the study, they fall into four different categories. Although not all categories are filled, a pattern emerges concerned with the tension between specialists and teachers.

At one extreme of the continuum are Mrs. O, Mrs. D, and Mrs. H who have convenient lines of communications with teachers and have ample supplies of negotiable resources. These specialists are largely able to defer and display their deference to what teachers consider as their legitimate domains of authority and hence experience relatively little interpersonal tensions with teachers. Mrs. O, Mrs. D, and Mrs. H can allow teachers to decide what students will receive specialized instruction, what the nature of the specialized instruction will be, and within limits, when specialized instruction will be given.

The itinerant specialists' proximity to teachers allows them to share ideas. The specialists' time and material resources allows them to provide assistance to teachers upon request. One commonly used phrase of these specialists is: "What can I help you with?" This visibility of these specialists to teachers allows them to display personal qualities of friendship, sociability, and openness and at the same time avoid appearing snobbish or arrogant. Mrs. F feels she has been successful in working in other teachers' classrooms because she is "open" and "nonjudgmental." Another specialist, who was interviewed, feels she has been successful in working with teachers because she has been able to demonstrate that she is "adaptable," "complimentary," "supporting," "nonthreatening," and "diplomatic."

All of the itinerant specialists are able to demonstrate that they can be trusted. These specialists are more or less exposed to certain aspects of teachers' work which the teachers prefer to remain confidential. The specialists are able to show that they can be trusted by not passing on confidential information to other teachers, administrators, or parents.

The rules (or, in the case of Mrs. H, the interpretation of the rules) which regulate the work of these specialists allows them to participate in and share the burden of school duties. Mrs. D, for example, has volunteered to help in her school's "enrichment program." The enrichment program involves a variety of nonacademic activities held for students once a week during the last hour of the school day and supervised by teachers. Mrs. D reports that

	Quality of Lines of Communication with Teachers		
Availability of Negotiable Resources	Convenient	Moderately Convenient	Inconvenient
Modest		Mr. G	Mrs. C Mrs. F Mrs. J
Ample	Mrs. D Mrs. H Mrs. O	Mrs. Ja Mrs. S	

Figure 3

A categorization of the specialists according to the quality of lines of communication they have with teachers and the supplies of negotiable resources.

when she first came to her school as a specialist, she did not "do enrichment," but admits ". . . that did not go over well with teachers." Mrs. D notes that "doing enrichment comes under 'Getting along with the staff.'"

Because teachers have subtle, yet effective ways of keeping itinerant specialists out of their classrooms and away from students, the specialists are forced to let individual teachers decide whether they want to coordinate their work with the specialists. Hence, Mrs. D, Mrs. O, and Mrs. H are required to abide by the norm which specifies that classroom teachers be allowed, but not forced, to work with other staff members.

The specialists who have convenient lines of communication with teachers and have ample supplies of negotiable resources are largely able to abide by the norms teachers hold for collegial relationships. Although the itinerant specialists violate the norms of entering other teachers' classrooms and watching teachers work, the specialists are able to overcome the violation of this norm by acting in a trustworthy manner.

At the other extreme of the continuum concerned with the degree of interpersonal tension the specialists experience with teachers are Mrs. C and Mrs. J. These specialists have inconvenient lines of communications with teachers and have modest supplies of negotiable resources. (Mrs. F also falls into this category. However, because she does not have to schedule her students into her program, she has a different relationship with teachers.) These specialists are largely unable to defer or display deference to what classroom teachers regard as their legitimate authority and hence experience relatively high levels of interpersonal tension with teachers. The rules which regulate their work preclude them from letting teachers have a voice in which students will be served. Only to a limited extent are the specialists able to allow teachers to decide when specialized instruction will be given. Their physical distance from teachers does not allow them to have much, if any, say regarding the content of the instruction which will be provided certified students.

The physical distance from teachers and the lack of negotiable time and material resources almost precludes Mrs. C and Mrs. J from sharing ideas and materials with teachers and occasionally helping teachers. Furthermore, the physical distance of these specialists from teachers prevents them from displaying personal qualities and their exaggerated isolation makes them appear aloof in the eyes of teachers.

The specialists, by virtue of the rules which regulate learning disabilities programs and by the interpretations of the rules by their district supervisors, are largely exempt from being assigned school duties, for example playground duty, bus-line duty, and the like.

When certified students are assigned to teachers, the teachers have little choice in whether they will coordinate their work with these specialists. This is not to imply that all teachers with certified students in their classes only reluctantly coordinate their work with these specialists. Nonetheless, the fact that teachers who have certified students assigned to their classes have no choice in deciding whether to coordinate their work with these specialists violates a collegial norm among teachers.

Mrs. C and Mrs. J, due to their inconvenient lines of communications with teachers and modest supplies of negotiable resources are largely unable to comply and demonstrate their compliance with the norms teachers hold for collegial relationships.

The specialists Mrs. Ja, Mrs. S, and Mr. G hold positions on the continuum concerned with the degree of interpersonal tension with teachers between the extremes. In relationship to the specialists at the extremes, they experience intermediate levels of interpersonal tensions with the teachers with whom they share students. Space limitations of the present analyses does not permit a complete discussion of these cases.

The Task of Teaching Difficult-to-Teach Students

As previously discussed the nine specialists are expected to provide specialized instruction which is oriented to raising the academic achievement levels and, in some cases, changing the social conduct of students who are deemed difficult-to-teach. The specialists find themselves in a problematic situation because they do not have at their disposal instructional theories which, if employed, would predictably and dramatically raise the academic achievement levels and improve the social conduct of difficult-to-teach students. Hence, the question arises: How do the specialists engage in the task of teaching difficult-to-teach students in the absence of unique instructional theories?

In place of using different and superior theories and techniques for predictably increasing student achievement and/or changing social conduct, the specialists employ essentially the same instructional techniques that regular classroom teachers use. Although the instructional technology that the specialists employ is no different than that which teachers use, the technology is employed in a different organizational setting. Whereas regular classroom teachers work with 20 to 30 students most of the time, the specialists work with small groups consisting of about six students for intervals ranging from 15 minutes to several hours per day. In this type of setting difficult-to-teach students receive intensified and, in many cases, personalized instruction from the specialist.

Some of the specialists appropriately characterize working with students in small groups as "giving attention." For example, Mr. G states:

> I try to give 20 minutes of individual attention [to each student in the group each day.] [During this time] I talk about what the kids want to talk about. I review the day's work and give personal instruction in language arts.

Not only do the students in the specialist's case loads get the attention of the specialists, but, in most cases, the attention continues regularly for a relatively long period of time. Speaking of time as an important aspect of her instructional method, a reading specialist who was interviewed notes:

> First grade -- it's more preventative. We're trying to give more attention to those children so they don't develop reading deficiencies.

The specialists expect that student progress will be gradual and, hence, specialized instruction will be required for an extended period of time.

Although the instructional techniques used by the specialists in working with difficult-to-teach students do not rest on a fundamentally different instructional theory than those which form the foundation of the classroom instruction used by regular classroom teacher, it is important to emphasize that the organization of the students into small groups for instruction is substantially different than a classroom organization. In this paper the provision of instruction to difficult-to-teach students in small groups over a period of time by a specialist will be referred to as giving time and attention.

It has been pointed out that the specialists provide time and attention to students in small groups rather than in class-size units. It is also important to note that the specialists rarely work with students individually in tutorial-like arrangements. The sizes of the specialists' case loads, coupled with the amount of time available for instruction, make it organizationally unfeasible for the specialists to work regularly with students one-at-a-time.

The Process of Giving Time and Attention

Although the specialists schedule and work with groups rather than individual students, the way the specialists provide time and attention to students varies among the specialists. Some of the specialists provide instruction to small groups; whereas, other specialists provide instructin to individual students in a group setting. Specialists who are in the former category give time and attention to students collectively in groups. These groups can be viewed as mini-classes where students receive the same or nearly the same instruction simultaneously. The specialists who are in the latter category give time and attention to individual students in a group. Instead of giving students time and attention collectively and simultaneously, the specialists give students time and attention sequentially.

Specialists provide time and attention according to their spans of responsibility. An analysis of the number of lines of responsibility associated with the positions of the specialists included in the study allows the specialists to be divided into two groups. One group includes the specialists who have narrow spans of responsibility. The specialists in this group have relatively small case loads and are expected to coordinate their work with relatively few teachers. The other groups of specialists include those who have broad spans of responsibility. These specialists have comparatively large case loads and are expected to coordinate their work with a considerable number of teachers. Figure 4 displays the specialists according to whether they have broad or narrow spans of responsibility.

The differences in the spans of responsibility have some important organizational consequences for how the specialists can give time and attention to students. In order for the specialists with broad spans of responsibility (with the exception of Mrs. H) to have daily contact with all of their students, these specialists must schedule about twice the number of groups of students for about one-half the length of time in comparison to the specialists with narrow spans of responsibility. Because of limitations of time and constraints due to the number of students, it is organizationally unfeasible for the specialists with broad spans of responsibility to regularly provide individual attention to students. Too many students would have to be served in too short an amount of time. On the average, each specialist could give about five minutes of attention to each student daily.

In contrast to the specialists with broad spans of responsibility, the specialists with narrow spans of responsibility are able to schedule fewer groups of students per day for longer periods of time. Additionally, these specialists are able to schedule most students in more than one instructional group daily. Hence, for specialists with small spans of responsibilty, it is organizationally feasible to give attention to individual students sequentially in a group setting sometime during the day.

In the sections which follow, a more detailed analysis is presented regarding how the groups of specialists with different spans of responsibility provide time and attention to students.

Specialists with Narrow Spans of Responsibility

The specialists with narrow spans of responsibility include four learning disabilities specialists and one diagnostic specialist. None of these specialists is itinerant; all work in a single location. These specialists have case loads of about 17 students

Figure 4

Specialists' Spans of Responbility and the Characteristics of Their Spans of Responsibility

Specialist	Case Load Size	Number of Teachers Sharing Students	Instruction Time/Day (minutes)	Instruction Groups/Day n	Average Group Size	Average Instructional Time/Day/Group (minutes)	Average Student Contact with Specialist Per Day (minutes)
Specialists with Narrow Spans of Responsibility							
Mrs. C	16	4	330	9	4	41	75
Mr. G	15	4	315	4	3	79	107
Mrs. J	17	7	300	6	5	50	84
Mrs. F	18	(no data)	250[a]	5	6	50	83
Mrs. S	18	3	110[b]	2	5	55	54[c]
Mean	17	5	261 (less 110; mean = 299)	5	5	55	81
Specialists with Broad Spans of Responsibility							
Mrs. O	41	9	195	11	4	18	19
Mrs. D	44	10	265	9	5	29	30
Mrs. Ja	84	14	215[d]	14	6	34	34[f]
Mrs. H	36	4	275[e]	8	7	34	56[g]
Mean	51	9	237	11	6	29	35

Figure 4 (continued)

[a] Mrs. F is a learning disabilities specialist in a secondary school. Similar to the other teachers in her school, she is assigned five 50-minute instructional periods and one 50-minute preparation period. The 50-minute preparation period accounts for most of the difference between the amount of time she offers instruction per day and the three specialists who precede her on the table.

[b] Mrs. S is expected to provide about two hours of instruction during the mornings and is expected to test students and prepare written diagnostic and prescriptive statements concerning students during the balance of the day. Her responsibilities for testing and preparing written diagnostic and prescriptive statements account for the relatively short amount of time she spends instructing students.

[c] Since Mrs. S has a full-time instructional aide working with her, the amount of time students have contact with adults during specialized instruction periods is about twice this number.

[d] Mrs. Ja schedules a full day of planning each week -- about five hours -- rather than scheduling planning time each day.

[e] Mrs. H does not schedule herself a planning period.

[f] Mrs. Ja supervises two full-time aides and one part-time aide who conduct most of the instruction. Since the aides are scheduled to work simultaneously, it is possible for Mrs. Ja to schedule 14 groups for an average of 34 minutes each in the course of 215 minutes.

[g] Since Mrs. H works with some students for more than one instructional session and others for only one session, the average amount of time the students have contact with her is greater than the length of one instruction session.

and coordinate their work with about five teachers (excluding Mrs. F for whom data were not collected in this regard). Typically the specialists "pull" students from several classrooms at one time for instruction. Students are with the specialists, on the average, for nearly one and one-half hours daily. A child may spend 45 minutes in the mornings with a specialist and then spend another 45 minutes during the afternoon again with the specialist. Although students are grouped, students may be scheduled to arrive and leave at different times. In these cases, the groups of students in the specialists' rooms have a changing character as students arrive and leave during different times of the day.

Routines and Controls

The specialists with narrow spans of responsibility organize their group sessions in a way so that each student will get a certain amount of uninterrupted personalized time and attention. In order to give undivided time and attention to students within a group setting, the activities of the group members must be routinized and controlled.

The specialists with narrow spans of responsibility indicate that bringing in and integrating students into a special room is important and requires a special set of procedures. Mrs. J attempts to make the initial contact with a newly certified student in the student's own classroom, yet this is not always possible. Mrs. J states: "I always try to go into the classroom and try to get acquainted with the child and talk to the teacher and then in my own mind figure out which group he'd work best in."

When new students are assigned to the programs of the specialists with narrow spans of responsibility, the specialists attempt to get students to feel that coming to a special room will be beneficial rather than stigmatizing. A quotation from the field notes involving Mrs. F and a newly placed fellow illustrates how a specialist orients a new student to a special program:

> Mrs. F examines the fellow on a list of words. . . . The specialists points to words in a book with her finger and the fellow pronounces them as best he can. Mrs. F states: "I thought you were a nonreader, but you're not. You likely are several grade levels below." Mrs. F asks: "What do you have trouble with, reading, spelling, math?" . . . Mrs. F continues: ". . . you need to know multiplication and division tables to pass most basic courses." Mrs. F makes flash cards and tests the student. Mrs. F asks the student: "Do you know about EH [programs for emotionally handicapped students]? Do you know the difference between EH and EMR [programs for educationally mentally retarded student?] Mrs. F explains that students [in EH classes] have been tested and are "proved" to have average or above average intelligence. . . . Mrs. F

> explains to the new student the class routine: "All students come in and go to work. Students can earn 50 points per class and get a B. An A requires more work -- homework!" Mrs. F concludes the conversation by telling the fellow where to put his "stuff"--class folder and other materials.

The above quotation illustrates how one specialist with a narrow span of responsibility orients a new student to a high school learning disabilities class. The specialist attempts to define the learning disabilities program as socially acceptable because only those who "are 'proved' to be average or above average in intelligence" are assigned to the class. Furthermore, the specialist orients the new students to certain class routines, grading procedures, and storage of materials.

Working to routinize classroom conduct does not stop with the initial meetings of specialists and new students. The specialists with narrow spans of responsibility establish different styles of classroom routines and the same specialist may use different routines for different groups of children. An example will be illustrative.

Mrs. J and Mrs. C prepare a folder for each student daily. In Mrs. J's classroom, when the students enter each day, they automatically pick up their folders and take them to their assigned seats. Mrs. C uses a slightly different procedure. Before students arrive, she places the appropriate folders at the desk where each child is assigned to sit. Both Mrs. C and Mrs. J clip a form to each folder indicating the activities the child is supposed to complete during the session. Mrs. J prepares a new form daily for each student checking and detailing activities on a standard list of activities. Mrs. C's form covers a five-day period, Monday through Friday. On these weekly calendars contained in each student's folder, Mrs. C lists daily activities. Both specialists indicate on their forms the activities students are to work on by themselves and those which are to be worked on with the specialist.

Loose in the student folders are the necessary worksheets on which students complete their assignments. Both Mrs. J's and Mrs. C's students can select, for the most part, the order in which they do their assignments. The work assigned to students for independent work includes the type of assignments which students can complete by themselves with little direct assistance from the specialists. Such activities include working with a variety of machines and completing routine exercises, for example, working in workbooks, completing arithmetic drills, working on game-type activities and completing tracing exercises.

In Mrs. C's classroom, students are assigned desks and only leave their seats to work on certain machines. During the course of an instruction period Mrs. C moves about the room checking on the progress of individual students and working with various students in a tutorial fashion. In Mrs. J's class students are also assigned seats, however Mrs. J does not move about the room very much. Students work at their own desks doing routine assignments but are called to a round table at the rear of the room by Mrs. J to get individual or small group instruction.

For the specialists with narrow spans of responsibility class routines for a group of students are a common practice. Students, when possible, are counseled individually and privately into the routine before becoming part of the routine. Although classroom routines vary in character and detail among specialists, each specialist's particular routine changes little from day to day and provides an orderly setting in which the specialist can give each student a certain amount of personal time and attention.

Although specialists with small spans of responsibility work to routinize class activities in order to provide time and attention to individual students, the group always makes its presence felt. Difficult-to-teach students tend to be active children with short attention spans who are easily distracted. It is not uncommon for difficult-to-teach children to have difficulty reading. Few seem to read silently very well; many tend to read out loud when working on individual assignments. If a group is engaged in exercises which require some reading, there tends to be a constant murmur within the group as each student struggles to interpret directions, read exercises, and write answers. A student may spontaneously exclaim: "He's making too much noise," or "Be quiet, I can't get it." When groups make their presence felt in terms of general disorganization or in terms of disruption of a particular individual, the specialists must momentarily interrupt their work with individual students to help other students and/or get the routinized activity of the groups reconstituted.

Incentives

Incentives are important ingredients in the instructional programs of the specialists with narrow spans of responsibility. Incentives are intended to motivate and stimulate the participation of students in specialized instructional programs. The variety of incentives used by the specialists can be divided into two categories.

First, there are incentives designed to draw students into the special room and make students feel comfortable while in the room. Specialists use several techniques here. First, care is taken to make the room decor appealing with attractive displays and, second, room furniture is selected and arranged to give a feeling of comfort and informality.

A second type of incentive used by the specialists with narrow spans of responsibility is designed to draw students into instruction and make learning seem more palatable. Instruction disguised as a game or otherwise clothed as an interesting activity are general examples. Virtually all five specialists use such incentives. For example, all five specialists view student use of a variety of machines as an incentive to participate and engage in special programs. Since machines used for the purposes of instruction tend to be relatively rare commodities in special classrooms and are generally not found in regular classrooms, the use of machines tends to be experienced by students as novel and interesting.

Incentives are important elements of the programs of the specialists with narrow spans of responsibility for an important reason. The specialists need the voluntary and enthusiastic participation of students. Since the specialists can neither command teachers to send students to specialized instruction nor command the students to remember to come to scheduled sessions, the specialists endeavor to make their programs attractive enough to students so that they will leave their classrooms and come to specialized instruction voluntarily and regularly.

The use of instructional machines by the specialists deserves some further comments. The purported value of these machines is to provide individualized student instruction without requiring the direct participation of the specialists. As mentioned earlier, these machines can serve as incentives to students also. However, in addition to any instructional and/or incentive purposes, these machines have another, and perhaps more important, function for the specialists. Because these machines command the attention of students using them, and to a certain extent, shield the students from other distractions in the room, the machines serve as the means of controlling students particularly while the specialists are giving time and attention to individual students. One aide in a "reading laboratory" which has an abundance of instructional machines, states: "We just plug them [the students] in and there they go!" Viewing a group of students using instructional machines does give one the impression that students are indeed "plugged in" and largely controlled by the machines for a period of time.

Rewards and Punishment

The specialists with narrow spans of responsibility use rewards and punishments to establish and maintain appropriate student classroom conduct. Rewards can be viewed as meaningful objects or symbols conveyed to students when they (individually or collectively) exhibit or closely approximate what the specialists regard as appropriate classroom conduct, either social, academic, or, perhaps both. Similarly, punishments are meaningful actions conveyed by the specialists to students (individually or collectively) when their conduct falls outside the limits of acceptability. Whereas, rewards serve the purpose of identifying and amplifying appropriate conduct, Waller (1932) argues that punishments serve the purposes of "defining the situation" (p. 200) for students. Waller notes: "it [punishment] puts the student in the way of distinguishing clearly the permitted and not-permitted, the right and the wrong within the complex social situation of the school" (p. 200).

Rewards used by the specialists vary from those which are concrete and physical to those which are symbolic and abstract. Concrete rewards include candy and small toys. Three specialists use toys as rewards. Mrs. J has her students "work" for small toys. Three specialists reward students with sweets. For example, Mrs. J rewards students for appropriate classroom conduct with small brightly colored candies from a large stoppered glass candy jar prominently placed on her desk and Mrs. C gives students marshmallows at the end of a session when she feels her students have worked hard and consistently.

Abstract rewards are those which only have symbolic meaning to students. "Points" are a symbolic reward used by four of the five specialists with narrow spans of responsibility. Points are something like money, but are less tangible than money. A point is an intangible commodity the value of which is jointly understood by specialists and their respective students. "Giving points" can serve as an immediate reward to a student for a successfully completed academic task but more often are given for working industriously.

Another type of reward used by two specialists is "free time." In each case after a certain number of tasks are completed successfully by a student, the student is given some "free time." During free time, students can select a variety of noninstructional activities, for example working on certain projects or playing with special toys.

A symbolic reward used by virtually all of the specialists with narrow spans of responsibility is verbal praise. Some examples of the praise given by the specialists will serve as illustrations:

Mrs. J: "Look at T's handwriting; it's really good. I'm proud of it." "Congratulations."

Mr. G: "That makes you feel good."

Mrs. C: "That's beautiful." "You go so fast, I can hardly keep up with you. You had only one page to fix up. You do good work."

Mrs. S: "You did real well." "Thanks for working so hard."

Mrs. F: "Now that's good. I think I should have you send out all the notes to teachers."

The punishments the specialists use are much more limited in comparison to the variety of rewards used. Although none of the specialists with narrow spans of responsibility physically punish students, all of the specialists use a form of nonphysical punishment from time to time. The nonphysical punishment takes the form of verbal reprimands. Reprimands which are designed to startle and/or humiliate students can be viewed as a mild type of punishment even though direct physical pain is not inflicted (Sieber, 1979). Examples of the verbal reprimands used by the specialists are listed below:

Mrs. C: "I don't need the noise." "Gum again!" "Remember any page which is sloppy you have to do over."

Mrs. S: "Jerry turn around and pay attention." "Bill take your ear phones off." Bill responds to the command. "Are you interested in what they're doing back there?" Bill responds: No. "Then pay attention to what you're doing."

Mrs. F: "You can tell us later. Some of us want to get our work done." "Better watch the points, David."

Mrs. J: "We all have to do something we don't like. Do you want to stay in at recess?" "You are interrupting me."

Mr. G: "What can I help you with?" "Can I help you?"

Bidwell (1970) suggests that schools and teachers establish at least two types of rules with respect to student conduct. In one category are rules which deal with the organizational aspects of school and classroom life of students. Rules in this category serve two purposes. First, some spell out the expected relationships of students to the school as an organizational and, second, others define the relationships among students while in the organization. Examples of the former group include rules regarding examples of the latter group include rules dealing with the appropriate social interactions of boys and girls in schools and classrooms. Bidwell notes that rules designed to regulate the relationships of students in schools or classrooms or regulate the interactions of students among one another may be "only indirectly related to the organization's professional task" (p. 45).

In the second category of rules, suggested in Bidwell's work, are rules regarding the appropriate academic performance of students. Such rules may be organization-wide, for example, the minimum grade point average which students must maintain and the minimum number of credits which students must accumulate in order to graduate from high school. Rules regarding appropriate performance may also be specific to individual teachers and classrooms, for example, rules or standards concerning acceptable levels of academic performance.

Most rewards used by the specialists are given to students for complying with the organizational rules regulating classroom life rather than for meeting academic standards. Similarly, most punishments are handed out for noncompliance with the classroom rules and not for failure to meet academic standards. The specialists who use candy as a reward use it to give special recognition to students who work independently, quietly, and industriously during an instructional period. Points and their translations into toys and grades are more of a reflection of classroom "work habits" than academic performance. The same can be said for the reward of "free time." Verbal reprimands are given more often for infractions of classroom rules than for substandard academic performance. The list of reprimands on a previous page reflects this trend.

Although more often rewards and punishments are oriented respectively to compliance and noncompliance with classroom rules, rewards and punishments are conferred to individual students for meeting and for failure to meet academic standards. Rewards and punishments oriented to academic standards typically take the form of verbal praise and verbal reprimands, respectively. The specialists as a group, however, praise students more for meeting academic standards than they reprimand students for not meeting these same standards.

Classroom routine and control procedures reinforced by rewards and defined by mild punishments have an important function in the rooms of the specialists with narrow spans of responsibility. Well established and stable routines provide settings in which the specialists can give time and attention to individual students. The specialists regard these personal and somewhat private meetings between themselves and individual students as the most important part of specialized instructional programs. The specialists refer to the meetings during which they give personal and individual time and attention to students as working "one-to-one" with students.

Working One-to-One

Although the specialists with narrow spans of responsibility have their own personal styles of working one-to-one with students, there are important similarities among the specialists. Some of the important similarities will be examined. In working one-to-one, the specialists use relatively simple instructional materials. These include cards, lists, and small books. Cards may be commercially prepared or may be a homemade variety. On a set of cards may be printed several large letters, a word, or an arithmetic fact. When a specialist shows the card to a student, the student is supposed to pronounce the sounds indicated by the combination of letters or pronounce the word or give the answer to the arithmetic fact. One specialist frequently carries blank cards and felt-tip pen in her pocket to tailor-make cards as she needs them.

Lists of words may also be used by the specialists. The words are usually of a certain type, for example words emphasizing the pronunciation of a certain letter of commonly used but difficult to learn words. Sometimes the word lists show signs of considerable use. Mrs. J places her word lists in transparent plastic cases to keep the lists from wearing out.

Small books of various sorts are used by the specialists in working one-to-one with students. Some of these books are specially designed for working with students who find reading difficult; other books include those which the specialists have selected and purchased themselves because, as Mrs. C states: "The children can read them."

The actual instructional techniques specialists use when working one-to-one with students also have a fair measure of commonality. One-to-one instruction can be viewed as a sort of turn taking process between a specialist and a student. The taking of turns assumes the general form: Specialist, student, specialist student . . . The sequence of turns may begin, for example, with the specialist showing a student a card with a letter or group of letters on it and pronouncing the sound represented by the letter or letters. The specialist will then ask the student to pronounce the sound indicated by the letters. Then the specialist will show the student a set of cards on which are short words involving the letter or letters. Upon showing each card, the specialist will then ask the student to pronounce the word. After the student pronounces each word, the specialists will indicate whether the student was correct. If the word was not pronounced correctly, the specialist will pronounce the word correctly before going on to the next word card. The turn taking process may begin with the specialist directing the student to do something, say read the words in a list. After each word is read, the specialist will indicate to the student if the word was read correctly. If the word was pronounced correctly, the student will proceed to the next word. If the word was mispronounced, the specialist will pronounce it correctly and have the student repronounce the word correctly before going on to the next word. Sometimes, but not very often, a specialist and student will take turns together, for example, reading a short paragraph out loud together. One specialist refers to this technique as the "neurological impress" approach.

When examining the materials and instructional techniques that specialists use when giving personal and individual time and attention to students during one-to-one sessions, one is impressed by the fact that both instructional materials and techniques are relatively simple and straightforward. Although neither the materials nor the techniques are very complicated, certain conditions seem to be necessary for this type of instruction to be effective in a specialist's room. First, a specialist and student need a period of relatively uninterrupted time together. And, second, the instructional periods must take place regularly. Specialists accomplish the first by routinizing and controlling the activities of the group through the use of individual and engaging activities. The second is accomplished through the scheduling process, i.e., getting and maintaining regular and orderly access to students.

Individualization

The five specialists with narrow spans of responsibility regard their programs as being "individualized." The notion of individualization usually carries the meaning that an instructional program is specifically designed to "meet the needs" of each student. The data in this study suggest that specialists with narrow spans of responsibility practice individualization in a slightly different way which takes two forms. First, the specialists use the same instructional materials for different students, yet do not necessarily have all students placed at exactly the same place in the instructional sequence. Second, the specialists regularly give students individual and personal time and attention. During one-to-one sessions specialists use the same instructional materials and similar instructional techniques for different students. Individualization seems to take most of its character from the fact that students are at different places in the curricular sequence and that during one-to-one sessions specialists vary the rate at which instruction is given.

Specialists with Broad Spans of Responsibility

The specialists with broad spans of responsibility include three specialists associated with specially funded projects and one learning disabilities specialist. Three of these specialists are itinerant within their own schools and, hence, have considerable contact with other staff members. Although Mrs. Ja works in a single location, she has considerable interaction with other staff members because she works in a central location in her school.

On the average, the specialists with broad spans of responsibility work with 51 students and coordinate their work with nine classroom teachers. Furthermore, these specialists work with an average of 11 student groups daily for an average of one-half hour each. Because of their relatively large case loads and their work locations, the specialists with broad spans of responsibility work with students differently than the specialists with narrow spans of responsibility.

Routines and Controls

The specialists with broad spans of responsibility generally provide group instruction rather than individual instruction in a group setting as do the specialists with narrow spans of responsibility. In a group instructional setting, routines are as important for the specialists with broad spans of responsibility as they are for the specialists with narrow spans of responsibility but for different reasons. Since the specialists with broad spans of responsibility work for relatively short periods of time with a number of groups of students each day, it is important for the specialists that the children are organized and ready for instruction when the specialists arrive or, in the case of Mrs. Ja when the instructional period begins in the math lab. Rounding up children eats into instructional time, and problems can begin to occur with the remainder of the unsupervised group.

Routines are developed by the specialists by establishing conditions for routines in each classroom and then by systematically conditioning students to the routines. Regarding establishing routines, Mrs. D states:

> You need to get them [the students] trained in order to best utilize your time. I'm in one classroom from 10:00 to 10:30 and in another from 10:30 to 11:00. This doesn't give me much time to get from one room to another. I try to get the students, when they see me come walking into the room, to go right over to where we work. We are always at the same table and they're ready to go when I walk in. That speeds up my time. I think you have to have these kinds of managerial techniques if you are working as a resource person [a specialist] . . . otherwise you could spend 10 minutes collecting them all and 10 minutes passing out the materials. When I get a routine down with them they don't seem to mind missing whatever is going on in their class because they also know when they will be done with me and they can judge when they can go back and finish whatever it was that they were doing.

The specialists stabilize routines by being dependable and punctual, this is to say by meeting with each group each day at the scheduled time. One is impressed with the importance the specialists place on punctuality. It is not uncommon for a lesson to be terminated rather abruptly when a specialist glances up at the classroom wall clock and discovers the scheduled time is over. For example, when Mrs. O discovers she is out of time she quickly punctuates the conclusion of her instructional session with: "We're just about out of time" or "We've got to stop now."

Supervision and group control during instruction is not as problematic for the specialists with broad spans of responsibility as it is for the specialists with narrow spans of responsibility. There are several reasons for this difference. The specialists with broad spans of responsibility rarely spend any more than 30 minutes with a group of students and may spend as few as 15 minutes; whereas, the specialists with narrow spans of responsibility are typically with groups of students for nearly one hour. Second, the specialists with broad spans of responsibility begin and end instruction at the same time for all the students in a group. This is not necessarily the case with specialists with narrow spans of responsibility. Students may be scheduled to arrive and leave during instructional sessions. Third, the children are close to the specialists, sitting around a small table, and are typically doing just about the same thing, for example, taking turns reading out of a book, responding to cards held up by the specialist, or playing an instructional game. The specialists with narrow spans of responsibility typically have students spread about the room working on different assignments and/or pieces of equipment. And, fourth, because the specialists with broad spans of responsibility generally work in regular classrooms, regular classroom teachers assume the responsibility for controlling and supervising the students who are not working directly with the specialist. The specialist with narrow spans of responsibility, as they work one-to-one with each student, must also supervise and control the balance of the group.

Incentives

The specialists with broad spans of responsibility find they have to compete, as it were, with regular classroom teachers for the attention and participation of students. Mrs. D notes:

> You're constantly feeling like you have to make it interesting enough that you can take them away from what they're doing. Obviously you can physically take them away. I could say: "I'm bigger than you are; now come on we are going to go over there and read." A lot of times you're coming into a situation where they are doing something they would rather be doing and you have to work them out of it.

Mrs. D's observation was emphatically confirmed when, for several days, she attempted to give reading instruction to a small group in a classroom while the rest of the class was engaged in making Valentines. Mrs. O runs into a similar problem daily in one classroom. During the time when Mrs. O gives reading instruction in the classroom, the regular teacher is reading stories to the rest of the class.

In order to successfully compete for the attention and voluntary participation of students in special instruction, the specialists use certain incentives. Generally, the incentives are selected and designed to make specialized instruction appear to be fun and interesting. Mrs. Ja states:

> We try to do things that they would be interested in, something different than [happens] in the classroom . . . . [We] work around games and things like that.

All four specialists use games as an incentive to secure participation of students. The games frequently take the following format. The specialist sits in front of a group of students with a pack of cards on which are printed words or arithmetic facts. The specialist holds up one card at a time in a way that every student in the group can see it. The first student to pronounce the word correctly or give the correct answer to an arithmetic fact gets the card. When the specialist has gone through the entire pack of cards, the student with the most cards wins the game.

In addition to games involving word and arithmetic cards, the specialists use a variety of other incentives to attract students to, and insure their participation in, specialized instruction. Mrs. D has her students tape record short stories. Mrs. H regularly gives the students whom she instructs in her own room sweets at the end of each session. Mrs. O makes bookmarks with colorful labels glued on them and gives the markers to her students. Mrs. Ja uses a variety of games which involve the use of dice and attractively colored playing boards. One reading specialist who was interviewed describes the incentives she uses as "gimmicks." The specialist states:

> . . . I have little gimmicks. I have little cards that I carry around with me that liven up the phonics lessons. The students want to know what friends I have in my pocket.

Room decor and furnishings are not used by the specialists, with the exception of Mrs. Ja, as an incentive for participation for the obvious reason that they work primarily in regular classrooms. Mrs. D and Mrs. O have offices. Although Mrs. H is itinerant, she does spend about one-half of the school day working with groups in her own room. Her special room, however, is plainly decorated and modestly furnished in comparison to the rooms of the specialists with narrow spans of responsibility. Mrs. Ja and the other two specialists who occupy space in their school's Instructional Media Center spend considerable time and effort to make their lab areas attractive in appearance and comfortable in feeling. A number of colorful decorations on the walls and hanging from the ceiling give the lab area an animated appearance. The carpeted floor and neatly arranged furniture convey a feeling of comfort and warmth.

Incentives used by the specialists with broad spans of responsibility serve a similar purpose as they do for the specialists with narrow spans of responsibility. The specialists with broad spans of responsibility, as do the specialists with narrow spans of responsibility, use certain incentives to gain the voluntary participation of students in specialized instructional programs. Because three of the four specialists with broad spans of responsibility work in regular classrooms, these specialists do not need incentives to draw students away from their regular classrooms. The one specialist with a broad span of responsibility who provides instruction in a "lab" does, however, attempt to provide incentives to attract students into the lab and away from their regular classrooms. All of the specialists with broad spans of responsibility do feel compelled to provide incentives for students to voluntarily and regularly leave regular classroom activities and engage in specialized instruction.

Rewards and Punishments

In contrast to the specialists with narrow spans of responsibility, the specialists with broad spans of responsibility use rewards more modestly. As mentioned above, Mrs. H does give students sweets at the end of sessions held in her own room. However, because Mrs. H gives out sweets regularly, they take on the quality of an incentive rather than a reward. None of the specialists reward students with toys. Points are used occasionally but only in connection with a specific game. The allocation of free time as a reward is almost an impossibility because the specialists are with their students for relatively short periods of time and also because the specialists are usually in other teachers' rooms.

Rewards are not entirely absent, however. Winning a game may be viewed as a reward. One itinerant specialist who was interviewed notes that she gives students "stars when they accomplish something." The only consistently used reward conferred by the specialists on students is verbal praise. Some examples will illustrate the type of praise used by these specialists.

Mrs. D: "You choose the best words."

Mrs. O: "That's very good."

Mrs. H: "Good!"

Mrs. Ja: "(none recorded)

As is the case with specialists having narrow spans of responsibility, the only punishments the specialists with broad spans of responsibility use on students are verbal reprimands. All the specialists with broad spans of responsibility use this type of punishment from time to time. Some examples will illustrate the type of verbal reprimands given by the specialists.

Mrs. D: "Listen! Who's going to read these?"

Mrs. Ja: "Will you be quiet and sit down?"

Mrs. O: "You are doing a lot of playing today, Eric."

Mrs. H: "Better get on the next page."

The specialists with broad spans of responsibility, as they provide group instruction, are in a position to directly supervise students. Hence, the need for indirect controls to gain compliance with group organizational rules through the use of reward systems is less necessary for the specialists with broad spans of responsibility than for specialists with narrow spans of responsibility. However, because the specialists are in close proximity to their students and because controlled interaction is essential in small group instruction, the specialists with broad spans of responsibility tend to reprimand students more for not complying with group organizational rules than the specialists with narrow spans of responsibility. Similar to the specialists with narrow spans of responsibility, the specialists with broad spans of responsibility praise students more for acceptable and superior academic performance than they reprimand students for failure to meet academic standards.

Instruction

Three of the four specialists with broad spans of responsibility provide group instruction almost exclusively. In these cases the specialists give time and attention to small groups of students collectively rather than sequentially. Only Mrs. H deviates somewhat from this pattern. Three-fourths of her instructional sessions essentially involve group instruction similar to the other specialists. However, about one-fourth of her instructional sessions follow the format of the specialists with narrow spans of responsibility. This is to say that during about one-fourth of her instructional sessions, Mrs. H works with individual students in a group setting. Of the sessions in which Mrs. H provides group instruction, about two-thirds involve working with small groups of students in her own room or in regular classrooms and about one-third involves assisting students with class assignments in their regular classrooms.

Although assisting students in their regular classrooms with class assignments is not identical to providing small group instruction, there are important similarities. First, the students are all working on the same assignment. Second, the period of time given for the assignments is the same for all students, i.e., all students are expected to begin and end the assignment at the same time. And, third, most of the students in the class remain under the supervision of the regular teacher. Some differences between helping students with class assignments and providing small group instruction are that the students are not necessarily in close proximity to one another and the specialist is not near all the students at the same time. Because helping students with regular assignments closely approximates giving group instruction, Mrs. H's instructional pattern, for the most part, follows the pattern of the other specialists with broad spans of responsibility.

The processes of giving time and attention during group instruction vary in style among the specialists; however, there are some important commonalities. Commonalities include those instructional activities which the specialists typically use and also instructional activities which they typically do not use.

One instructional mode which the specialists typically do not use is lecturing, i.e., presenting some information to all members of the group simultaneously. Two of the specialists, however, use this technique occasionally. For example, Mrs. O makes brief presentations regarding the concept of contractions and, similarly, Mrs. H uses a mini-lecture approach to explain the techniques of writing single paragraph summaries.

The most common process of instruction employed by the specialists with broad spans of responsibility involve the specialists giving individual students in a group small amounts or doses of attention sequentially and repeatedly while controlling and directing the attention of the other students in the group. The general form of the process is similar to the process used by the specialists with narrow spans of responsibility. The specialists with narrow spans of responsibility, however, give each student an extended amount of attention before turning to another student; whereas, the specialists with broad spans of responsibility give each student a relatively small amount of attention before turning to another student. Consequently, the pace at which the specialists with broad spans of responsibility direct their attention to different students is relatively rapid giving the overall effect of providing attention simultaneously and collectively to students.

An example of how the specialists give individual attention, while controlling the attention of the other group members, is through the use of a variety of forms of questioning. The most common form of questioning involves the use of cards. Questions are typically presented to students on cards each containing a word or an arithmetic fact. A specialist usually holds up a card for all members of the group to see and then selects a student to respond to the question indicated on the card. Following the student's response, the specialist then indicates if the response is correct or incorrect. The process of selecting a student for a response and evaluating the response can be viewed as giving the student a small amount of personal attention. The quick pace of questioning activities, coupled with the uncertainty of which questions will be posed and the uncertainty of which students will be selected to respond, attracts and holds the attention of the students in the group.

Some of the activities the specialists use to give individuals small amounts of attention sequentially and repeatedly require the specialists to give students relatively long periods of attention; whereas, other activities allow the specialists to give students relatively brief periods of attention. In questioning, for example, the specialists are able to move their attention from student to student at a rapid pace. However, during sessions in which students get individual turns reading orally, the specialists are required to give each student longer increments of attention.

When the activities require the specialists to give relatively long periods of attention, it is not uncommon for the specialists to mix these activities with ones which allow attention to change at a more rapid pace. For example, after Mrs. O has her students each read a page orally, she frequently has them read a page silently and then asks them questions about what they have read.

Although most of the instruction used by the specialists with broad spans of responsibility requires the specialists to give attention to students sequentially and repeatedly, there are certain processes which allow the specialists to give attention simultaneously and collectively to the members of a group. For example, Mrs. H and Mrs. D have students read orally in unison. During such reading sessions, the students can simultaneously perform for the specialist and receive the specialist's attention collectively. Another example of giving attention to students simultaneously is used by Mrs. O. She prepares envelopes of word cards for each student and has them find certain words at the same time and place them on individual game-type boards. A quotation from the field notes illustrates her technique:

> Mrs. O is working with a group of four students each of whom has an envelope of word cards and a board on which to place the cards. Mrs. O says: "Find 'make.' That's not 'make'. What letter does it start with? Now look again. 'Good.' Cookies are 'good.' That's right. Alright, the next word is 'plays,' 'plays' . . ."

Regardless of the precise nature of the instructional process, it is important to note that most of the instruction given by the specialists with broad spans of responsibility involves having students perform a series of tasks or activities and then acknowledging the correctness or incorrectness of the performance of each task before progressing to the next one. The tasks may be relatively simple, for example, having a student look at a word or an arithmetic fact printed on a card and then having the student pronounce the word or give the answer to the arithmetic fact. Tasks may be more complex, for example, having a group of students read a page in a book silently and then having them respond to several simple questions about what has been read. Even though some of the tasks are more complicated than others, all are relatively simple, and none require much time.

Not only are the instructional processes relatively simple, but the instructional materials are also relatively common and uncomplicated. The stock in trade, as it were, of the specialists with broad spans of responsibility are word and/or arithmetic cards -- commonly known as flash cards. These are usually made by the specialists themselves with felt-tip pens on 3 x 5 cards or on pieces of construction paper. The reading specialists use reading books of various sorts. Mrs. D uses sets of small hard cover easy-readers with large print and imaginative illustrations. Mrs. O uses the regular classroom sets of readers. All four of the specialists use traditional workbooks and/or worksheets with some of their groups. Although the students who come to the math lab play a variety of board games, these are just another variation of arithmetic flash cards. A roll of the dice or several spins of a wheel determine the numbers to be multiplied, for example, while a correct response allows students to move a marker on a game board ahead a certain number of spaces. With one exception the specialists with broad spans of responsibility do not use instructional machines. The only specialist who uses a machine is Mrs. D who sometimes tape-records her students reading and then lets the students listen to what they have read.

Because of limitations of time and constraints due to the number of students, the specialists with broad spans of responsibility are forced to instruct students collectively rather than individually. In collective instruction, students are engaged in essentially the same activities which begin and end at the same time. However, within the collective setting, the specialists give individual students brief, yet repeated, amounts of attention.

Work Orientations of Specialists

Lortie (1969) argues that structural features associated with the positions of classroom teachers orient teachers work toward students and away from other teachers and school administrators. Some of the features include isolation from other teachers and the inability of school administrators to control work rewards, and salary for example. Because of these and other structural features, Lortie argues that teachers gain satisfaction in their work through students. Additionally, Lortie argues that as teachers teach and students learn, teachers receive intrinsic rewards from the teaching-learning process. Hence, the work orientation of classroom teachers toward students is reinforced in a direction of children and away from adults.

With the exception of Mrs. S and possibly Mrs. Ja, the specialists spend most of their workday providing instruction for difficult-to-teach students. However as noted previously, all the specialists have significantly more responsibilities to other staff members than do teachers. The specialists develop and maintain different types of relationships with students and staff members. The character of the relationships specialists have with students and staff members depends on two factors in their work contexts. One of these factors is the specialists' span of responsibility and the other is the quality of lines of communication the specialists have with other staff members.

With respect to work orientations, the specialists can be categorized in a two-fold table. Figure 5 organizes the specialists according to their quality of lines of communication with teachers with whom students are shared (convenient, moderately convenient, or inconvenient) and their span of responsibility (narrow or broad). The table produces six categories. Considering the nine specialists included in the study, they fall into four different categories. Although not all categories are filled, a pattern emerges along two independent continuum. One continuum is concerned with relationships with students; the other is concerned with relationships with staff members. Together the continuum indicates the work orientation of the specialists with respect to children and adults. One work orientation is held by the specialists Mrs. C, Mrs. F, and Mrs. J. These specialists have inconvenient lines of communication with teachers and narrow spans of responsibility. The work of these specialists is oriented to developing and maintaining personal relationships with students. Another work orientation is represented by the specialists Mrs. D, Mrs. H, and Mrs. O. These specialists have convenient lines of communication with teachers and broad spans of responsibility. The work of these specialists is primarily oriented to developing and maintaining personal relationships with the teachers with whom students are shared and secondarily to developing personal relationships with small groups of students. Still another work orientation is held by the specialists Mr. G, Mrs. S, and Mrs. Ja. These specialists have moderately convenient lines of communication with teachers and have either narrow or broad spans of responsibility. The work of Mr. G, Mrs. S and Mrs. Ja is oriented to

	Quality of Lines of Communication with Teachers		
Span of Responsibility	Convenient	Moderately Convenient	Inconvenient
Narrow		Mr. G Mrs. S	Mrs. C Mrs. F Mrs. J
Broad	Mrs. D Mrs. H Mrs. O	Mrs. Ja	

Figure 5

A categorization of the specialists according to the quality of lines of communication they have with teachers and their spans of responsibility.

developing and maintaining personal relationships with staff members other than teachers with whom students are shared.

As noted above, the specialists with narrow spans of responsibility and inconvenient lines of communication with staff members include Mrs. C, Mrs. J, and Mrs. F. These specialists work with relatively few students for comparatively long periods of time. Additionally, the students with whom these specialists work do not change very much during the school year, and furthermore, a student may be with a particular specialist for several years. Due to their prolonged contact with their students, the specialists become very familiar with them. The specialists get to know each student in a very personal and intimate way. A student's academic competence, social conduct, family background, and health history over times become common knowledge to a specialist.

The specialists' close personal relationships with students are reinforced by their isolation from other staff members. Isolation from other adults in the school, coupled with prolonged contact with a few students, allows the students to become the focus of the specialists' attention.

Consistent with Lortie's (1969) argument regarding isolation from other staff members, these specialists orient their work toward students and away from other staff members. These specialists when asked, "What is the most enjoyable aspect of your work?" give the following types of responses. One specialist responds:

> I don't know how you put words to it. The one-to-one relationship that you develop with kids . . . not that I need them to be my friends, but to see a kid who really hates himself, not hate himself, it's really neat.

Another specialist responds:

> The kids [are the most enjoyable aspect of my work] . . . . working with small groups of children and being able to see results. The most frustrating thing about working in a regular classroom [as a regular teacher] is that you have got thirty-some little bodies running around. I've got everybody, five of them, at a table. I know how they learn and I know what kind of materials to give them. Consequently, I see results. That, and the fact that they love to come to class. It's the highlight of my day. It makes my day worthwhile. It's a good job.

Both of these statements underscore two important points. First, the child or student is the important focus of attention in the work of these specialists. And, second, observing the child change at the hands of the specialists, brings the specialist a deep sense of satisfaction. Hence, for these specialists, their work orientation is toward changing the conduct of individual children.

As stated previously, the specialists with broad spans of responsibility and who have convenient lines of communication with staff members, particular with the teachers with whom students are shared, include Mrs. D, Mrs. O, and Mrs. H. These specialists have relatively large case loads and are with each student for a relatively short amount of time each day. Furthermore, the students within the instructional groups may change during the course of the year. Additionally, these specialists work with groups of students rather than individual students. Because of their limited contact with individual students, these specialists do not get to know their students very well. These specialists do not have the time for or work in settings which are conducive to developing close affective relationships with their students.

The quality of the relationships the specialists have with their students is not only conditioned by their limited contact with them, but is also affected by their relatively high rate of interaction with other adults in schools. These adults include other specialists, project directors, school administrators, school aides, parent volunteers, and particularly the teachers with whom students are shared. Hence, it might be expected that the contact with other adults would draw the specialists' attention away from their students and preclude the establishment of close affective ties with them.

One specialist spontaneously remarked:

> I missed teaching the first year . . . missed the kids . . . but not so much the second. Teaching is constraining, you cannot get out of the classroom.

This remark suggests that specialists who move from working with students in an isolated setting to a setting which involves considerable interaction with adults shift their attention away from students to adults and learn to value mobility and interaction with adults.

Whereas the specialists who work with relatively few students in an isolated setting gain satisfaction from working with individual students and seeing them learn, the itinerant specialists indicate that they gain satisfaction from working closely with adults, particularly the teachers with whom students are shared. For example, one reading specialist who was interviewed states:

> I guess working with all of the teachers [is the most enjoyable part of my work]. I really like that. There are nine teachers. They're all very easy to work with and I think working in the classrooms gives me good communications with them [the teachers]. It really gives me something in common with each one of them because I know all of their kids. . . . All I have to do is to mention one child and we're off and running.

> I feel like I know them [the teachers] all personally. When I taught in a classroom I knew them only through our contact in the lunch room. . . . That [working with teachers] I think is the most enjoyable. I like working with small groups of kids. That's fun. I don't think I have enough time to prepare for all the kids I work with, but I think that is universal.

This quotation illustrates two important points. First, the teachers with whom students are shared and not the students themselves command the primary attention of the specialists. And second, working with students in groups, but not individually, provides some satisfaction to the specialists. Hence for these specialists, their work is oriented primarily toward developing and maintaining relationships with adults, and second toward teaching and feeling responsible for the learning of small groups of children.

The specialists who have narrow or broad spans of responsibility and have moderately convenient lines of communication with teachers and convenient lines of communication with other staff members include Mrs. Ja, Mr. G, and Mrs. S. The relationships of these specialists with students, as might be expected, vary among the specialists. For Mr. G and Mrs. S their relationships with students are less personal than the relationships which exist between the isolated specialists and their students. For Mrs. Ja her relationships are more impersonal than the relationships which exist between the itinerant specialists and their students.

Mr. G has a small case load and works with individual students for comparatively long periods of time, yet his relationships with students are less personal than those which exist between the isolated learning disabilities specialists and their students. Mrs. S has a small case load, works with individual students for comparatively long periods of time each day, but only works with each student for several weeks during the school year. Mrs. S does, however, become familiar with her students through numerous testing sessions and through extensive case histories. Mrs. S knows about her students but does not know them personally very well. Mrs. Ja has a very large case load and works directly with students for only brief periods. She knows about her students' difficulties in arithmetic through reports submitted by teachers; however, she rarely gets to know her students.

The relationships of these specialists with their students are similar to the relationships specialists with similar spans of responsibility have with their students, yet the relationships are exaggerated in the direction of impersonality. For example, Mr. G has a narrow span of responsibility, and he develops comparatively personal relationships with his students. His relationships, however, tend to be less personal than those of the other specialists who have narrow spans of responsibility and work in isolated settings. Similarly, Mrs. Ja's relationships with her students is more impersonal than the other specialists with broad spans of responsibility.

The common characteristic in the work contexts of these specialists, which conditions their relationships with students toward impersonality, is the relatively high level of interactions with other staff members. All three of the specialists work in locations where they experience a high level of interactions with other staff members, particularly other specialists, school aides, administrators, but not necessarily the teachers with whom students are shared. The interaction of these specialists with other staff members redirects the specialists' attention from working with students to interacting with adults. In addition to having a high level of interaction with staff members in and around their work locations, all three of the specialists are also closely involved with school committees or groups which are organized around concerns aligned with the specialist's work as specialists. Mr. G spends several hours each week involved with his school's Auxiliarty Services Committees. This committee is composed of a variety of specialists and other staff members who make recommendations regarding student problems referred to the committee by teachers. Mrs. Ja spends several hours a week meeting with a group composed of three other specialists, the project director, and the school principal. The meetings of this group are concerned with the school's assorted specially funded programs. Mrs. S's frequent conversations on the phone and in person with her district's assistant project director and project director occupy at least a half-hour of her time daily. The involvement of the specialists with school committees and groups further pull the specialists' attention from students and makes their relationships with students more impersonal than they would otherwise be.

As might be expected, the specialists indicate that they do not find that working with students provides them with their primary source of job satisfaction. For example, when Mrs. Ja was asked, "What is the most enjoyable aspect of your work?" she replied:

> I think seeing something finally carried out that was developed or thought about in committee meetings [is the most enjoyable aspect of my work]. Seeing something finally in operation whether it's the continuum, using the diagnostic prescriptive system, or, this year, setting up the math lab in the upper grades using individual contracts. I think seeing something carried out [is the most enjoyable aspect of my work].

Mrs. Ja's statement illustrates the importance of these three specialists place on working and interacting with staff members on projects related to their areas of specialization rather than working with students or teachers with whom students are shared. Hence, the work of the three specialists is oriented to developing and maintaining relationships with adults other than teachers with whom students are shared.

Implications of the Study

There is a temptation to state numerous and far reaching implications for practice from reports of qualitative research which endeavor to generate grounded theory. The temptation springs from the realism and detail often conveyed in such reports. However, because qualitative research devoted to the development of grounded theory is oriented to generating rather than verifying hypotheses, implications drawn from the research for practice must be made and accepted with considerable caution. With this brief caveat, the balance of this section will be devoted to an examination of some of the more obvious implications the present research has for school officials and school specialists.

The nature of the work of school specialists (as compared to classroom teachers and among school specialists) can be understood as conditioned by the interaction of three organizational variables or factors. These include organizational goals, organizational structure, and organizational technology. Although the work of school specialists is conditioned by the interaction of the three organizational variables or factors, only one appears to be more or less under the immediate influence of school officials. This factor is the organizational structure associated with the position of school specialists.

Notwithstanding the importance of organizational goals and organizational technology on the nature of the work of the school specialists, the present study suggests that both the organizational goals and the organizational technology which condition the work of school specialists are not under the immediate or direct control of school officials. The similarity of the organizational goals which guide the work of teachers and specialists suggest that the goals which direct the work of school specialists are not under the control of school officials. The discussions of Bidwell (1965) and Dreeben (1973) provide further support for this assertion.

In a similar fashion, the uniformity of the organizational technology which provides the foundation of the instructional work for both teachers and school specialists suggests that the organizational technology which provides the foundation of the instructional work of school specialists is not under the control of school officials. The positions of Dreeben (1970) and Lortie (1975) provide further support for this conclusion.

Additional support for the conclusions that neither organizational goals nor organizational technology are under the direct control of school officials is provided by Perrow (1965). He suggests that, in general, organizational goals and technology are established in broad terms by society beyond organization boundaries; whereas "[organizational] structure can operate in an autonomous fashion. . . ." (p. 914).

Under the rubric of organizational structure are three more specific variables or factors which condition the work of school specialists and over which school officials have at least a modicum of control. These include lines of authority, lines of communication, and lines of responsibility associated with the position of the school specialist.

In developing, stabilizing, or changing the nature of the work of school specialists, it is important for school officials, as well as for school specialists, to analyze closely the organizational structures associated with the position of school specialists. The present study suggests that the quality of the lines of formal authority associated with specialists' positions, the quality of the lines of communication linking school specialists and teachers, and the quantity of lines of responsibility associated with school specialists' positions are important factors which condition the work of school specialists.

School specialists typically hold positions in different authority structures than teachers and students and, hence, have no authority over teachers and little authority over students. The lack of authority over teachers and minimal authority over students makes regular and orderly access to students problematic for school specialists. However, the rules which direct the work of school specialists vary among specialists. Some specialists work under rules and regulations which provide them with resources useful for securing regular and orderly access to students and developing and maintaining harmonious relationships with teachers. Other school specialists, however, work under rules and regulations which provide them with few useful resources for gaining access to students or developing or maintaining harmonious relationships with teachers.

From an official perspective, changing rules and regulations so as to increase certain resources over which school specialists have control can lead to easier access to students by school specialists and relaxed interpersonal tensions between school specialists and teachers. Providing additional resources to school specialists through relaxing or adjusting rules and regulations entails some risks, however. The work of school specialists who have control over considerable supplies of resources may deviate from official expectations regarding the character of specialized programs.

School specialists typically have qualitatively different lines of communication associated with their positions than teachers. Yet among school specialists the quality of the lines of communication with teachers also varies. Some school specialists, primarily by virtue of their work locations, have regular and direct lines of communication with teachers with whom students are shared as well as with other staff members. Some specialists, on the other hand, are isolated from most other staff members and, hence, have considerable difficulty in communicating with the teachers with whom students are shared. Those specialists who have convenient lines of communications with teachers, develop more harmonious relationships with teachers, and gain access to students more easily develop somewhat impersonal relationships with students. The school specialists, on the other hand, who have inconvenient lines of communications with teachers, are not well liked by teachers, have difficulty getting access to students, tend to develop close relationships with students.

From an official point of view, adjusting the work locations of specialists to facilitate or hinder lines of communication between the specialists and teachers can be expected to have benefits as well as costs.

The lines of responsibility associated with school specialists' positions are typically more complex than those associated with teachers' positions. For teachers' lines of responsibility are congruent with formal lines of authority. For school specialists the lines of responsibility associated with their positions are generally not congruent with the formal lines of authority associated with their respective positions. Among specialists, however, the number of lines of responsibility associated with their position varies. Some school specialists are responsible for coordinating their work with a relatively large group of teachers and students. Other school specialists are responsible for coordinating their work with relatively few students and teachers. Specialists with broad spans of responsibility have more difficulty in scheduling access to students, allocate time to teachers rather than to students, provide group instruction for students, and develop somewhat impersonal relationships with students. School specialists with narrow spans of responsibility, on the other hand, experience less difficulty in scheduling students, allocate their time to students rather than teachers, provide individual instruction to students in group settings, and develop more personal relationships with students.

From an official perspective, the benefits of school specialists with narrow spans of responsibility can be achieved by increasing the number of school specialists in a school, yet the costs obviously include additional expenditures for more staff and/or reducing the number of students served.

The implications of the present research, or concerned with the work and organizational factors which condition the work of school specialists, for school officials can be summarized as follows. School officials have more direct and immediate control over organizational structure than over either organizational goals or organizational technology. Hence, school officials who are interested in changing or stabilizing the work of school specialists would be advised to examine, and perhaps change, the organizational structures which condition the work of school specialists. Any structural arrangements associated with positions of school specialists, however, have both inherent advantages and disadvantages.

Further research suggested by the present study can have several related points of departure. These include deepening, broadening, and generalizing it. Adding depth to the present study would involve adding more, yet similar, cases (specialists) and exploring in more detail the work of school specialists and the organizational factors which condition their work. Adding breadth to the present study would involve the systematic inclusion of other types of school specialists to the present sample, for example, specialists who work with gifted students, and itinerant music and art specialists. Research involving a greater variety of specialists might address such questions as: Is the work of these specialists conditioned by the same categories of organizational factors as the school specialists in the present study? If not, what are the factors and why are they different? Are the tasks which constitute the work of other types of specialists the same as the tasks which constitute the work of the school specialists in the present study? If not, what are the tasks and why are they different? Adding generality to the present study would move it from hypothesis generation to hypothesis verification. Generalizing would involve the development of an instrument based upon the substantive theory developed and the administration of the instrument to a random sample of a population of specialists holding positions similar to those school specialists presented here.

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